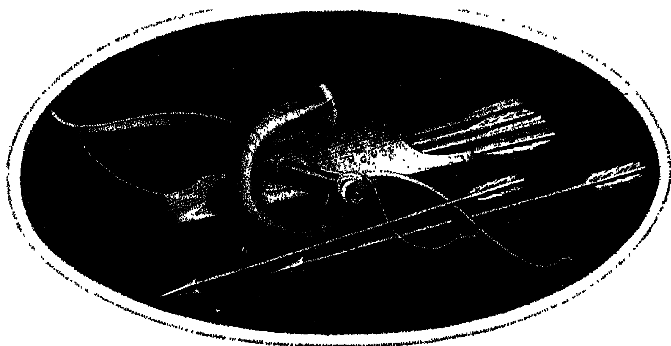


AN ESSAY
on
ARCHERY
describing
The Practice of that Art
in all
AGES and NATIONS



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AN

ESSAY ON ARCHERY;

DESCRIBING THE

PRACTICE OF THAT ART,

IN ALL

AGES AND NATIONS.

BY

WALTER MICHAEL MOSELEY, Esq.

——— τοξον δ' ανδρεσσι μελησει

Πασι, μαλιϛα δ' εμοι.———

Arcus viris curæ erit omnibus, maximè vero mihi.

MDCCXCII.

PREFACE.

BEING fond of the exercise of shooting the Bow, it has often excited in me a desire of forming some knowledge with respect to Archery. The means of attaining information, however, were not obvious, as no comprehensive treatise on the subject has appeared during an interval of almost two centuries and an half. The *Toxophilus* of Ascham, published in the reign of Henry VIII. cannot be esteemed a satisfactory account of this art, as it principally regards Archery in England; and as many circumstances of importance in relation to the Bow in foreign nations are omitted. In 1544, the time in which Ascham wrote, the knowledge of the Western world was but imperfect; and although some few American histories were written previous to that æra,

 yet

yet the jealoufy of the Spanifh court, ftudioufly confined within the narroweft limits it was able, all information relating to the newly difcovered continent. The manners and cuftoms of the Eaftern world were almoft equally unknown, as commerce had not at that time opened a familiar intercourfe with the inhabitants of this ifland. Thefe fources of information, therefore, which afford an ample field for the inveftigation of a modern writer, with refpect to Archery, could not have been enjoyed in fo remote a period as that in which Afcham lived.

During the laft century, two works appeared: "*The Art of Archery,*" by Gervas Markham, printed in 1634; and "*Wood's Bowman's Glory,* anno 1682. The former is nothing more than an abridgement of *Afcham's Toxophilus.* The latter, as its title page expreffes, is "An account of the many fignal favours vouchfafed to Archers and Archery, by thofe renowned Monarchs, Henry VIII. James, and Charles I." It contains the charter of Henry VIII. given to the Fraternity

nity of St. George—a patent of James I. to the ſame Society, for the encouragement of Archery, on the accuſtomed grounds near London—and a renewal of the ſame patent by Charles I. But the principal part of this little book, is a deſcription of a very pompous meeting, and cavalcade of Archers, under the Duke of Shoreditch, and the Worſhipful Citizens of London, on the 17th of September, 1583. Theſe two eſſays are at this time extremely rare, and of great value.

Finding the ſubject thus neglected, ſome ſcattered anecdotes which my memory had treaſured up in the courſe of ſtudy, led me to imagine, that a new ſelection of facts might prove intereſting; and the hiſtories of thoſe nations which were formerly, and which are at preſent in the continual cuſtom of uſing the Bow, as an inſtrument of war,—the writings of the Greek and Roman authors, whom experience, as well as report, enabled to relate circumſtances with reſpect to that weapon, as they found it among the nations their arms had often ſtruggled with and ſubdued,—pro-

 miſed

miſed to yield many opportunities of collecting materials for an agreeable narrative.

As the ſubject itſelf was eſſentially trifling, the purſuit of the object in view ſeemed ſcarcely worth the trouble neceſſary to accompliſh it; particularly as the facts which alone could form the baſis of a plan, were to be drawn from the depths of maſſy folios. However, as nothing which related to my favourite diverſion had ever eſcaped in the courſe of reading, without particular notice, the foundation of my ſcheme, by application, ſoon enlarged to a conſiderable extent.

My own curioſity was ſatisfied;—but having received much pleaſure and inſtruction in compleating the taſk preſcribed to myſelf, I was flattered in thinking it would prove an agreeable entertainment to my fellow Archers, if I ventured to produce an Eſſay for their inſpection.

There is a peculiar difficulty in writing on a ſubject little treated of by others; and whoever finds an *opportunity* of compoſing on a theſis under ſuch a predicament, will ſoon diſcover many unforeſeen inconveniences he

has

has to ſtruggle with. A critic of the eighteenth century will no doubt be aſtoniſhed to hear me ſay, my ſubject is new; for who will imagine any branch of literature to be neglected at this day, whilſt Caſtalio ſeems ſo abundantly to overflow its margin? This topic, however, ſeems to have lurked almoſt unſeen, not only among the Engliſh, but in every part of Europe. Men formerly, perhaps, were contented with the practice of Archery; and as the art in latter ages fell into diſuſe, no one paid attention to the ſubject.

The Aſiatic nations have, however, ſhewn a more ſteady attachment to Archery; and we are told that there are many hiſtories of that art, and Eſſays teaching the uſe of the Bow, written in the Perſian language.†

As the Bow, through a ſeries of ages, has prevailed a favourite weapon in the Eaſt, and among people whoſe language is highly metaphorical, it is perpetually alluded to in the Eaſtern compoſitions; and has gained a place among hieroglyphical figures. The Bow is ſaid

† Bibl. Orientale, par d'Herbelot. Art. *Caus.*

ſaid to repreſent a king; the Arrow an ambaſſador.§ It appears, alſo, from an anecdote related by Plutarch, that the coin of the Perſians was formerly ſtamped with the figure of an Archer. For Ageſilaus, being ſent againſt Tiſſaphernes into Aſia, by the Spartans, Tiſſaphernes, in order to engage the attention of that people at home, diſpatched a meſſenger loaded with gold, to excite the other ſtates of Greece to make war againſt them: and having ſucceeded in his deſign, it became neceſſary for the Spartans, that Ageſilaus ſhould be recalled to their aſſiſtance. As he was upon his return, he is ſaid to have told his friends, that Artaxerxces had driven him from Aſia with thirty thouſand *Archers*; inſinuating that he had received a bribe of Perſian money.‖

The Bow, the Arrow, the Quiver, the Corytos, are not unuſually to be ſeen on the ancient coins of Greece; and particularly on the Cretan. The Romans ſeldom ſtruck the trophies

§ "L'arc étoit chez le Moguls le ſymbole d'un Roi, & la fleche, celui d'un Ambaſſadeur & d'un Viceroy. *Bibl. Orientale.*

‖ Plut. Artexerxes, & Briſſonius de Reg. Pers. pg. 612.

trophies of Archery on their money; the reaſon of which will appear in the following pages; and I am ignorant of any more modern coins, on which theſe inſignia have been impreſſed.

The ſculpture of the Greeks, and the fables which have deſcended to us in their writings, conſpire to prove the high regard that people ſhewed from the Bow and its accompaniments. It is unneceſſary, in ſupport of this aſſertion, to relate the hiſtories of Apollo, Diana, Cupid, or Hercules; the tales of Abaris,* or of the Centaurs. Chiron, even to this day retains his place among the ſigns of Zodiac.

We are not entirely deſtitute of facts in England, from which to judge, that the Bow was highly eſteemed by our anceſtors. But as the arts a few ages back remained in a rude and barbarous ſtate; and as that little ſkill which was attained in ſculpture and painting, was chiefly employed in the decoration of religious buildings, and conſequently on ſacred ſubjects, among which alluſions to Archery could have no place; we do not perceive ſo

many

* Bayle has inveſtigated the ſtory of Abaris at full length.—See his Dict. Critique.

many permanent traces of this ancient and bloody art transſmitted to us, as might be expected, when we conſider the number of ruins ſubſiſting at this day, which were erected and ornamented at the time Archery was in its greateſt vigour. The teſtimony of hiſtory, however, clearly demonſtrates the partiality which was ſhewn to the Bow by our countrymen; and the value of that weapon in battle, is manifeſt, from the havock which the ſkill of our Engliſh Archers formerly ſpread on the continent, againſt the Iriſh, and againſt the Scotch.

What traces of Archery have deſcended to us from antiquity; and what remain at preſent in foreign nations, the Eſſay before us will diſplay. I haſten, therefore, to my ſubject, and forbear to keep the reader in ſuſpenſe.

I ſhall here, however, take occaſion to obſerve, that had I perſuaded myſelf to have ſpent more time on this juvenile production, both the language and arrangement would have been much corrected: in its preſent ſtate, it is with diffidence, and with a trembling hand I hold it forth to public view.

TO THE READER.

As many of the quotations contained in the following Eſſay, are drawn from works of which there are various editions; it may not be improper, for the ſake of verifying paſſages, to deſcribe thoſe herein made uſe of. As my notes were collected at diſtant times, and without any regard to publication, my manuſcript did not ſpecify the particular editions from which the quotations were made; except in ſome inſtances wherein the books uſed were not my own. Remembering this omiſſion too late, I have ventured to give a deſcrip-

a description of those few books, which I judged most liable to perplex the reader.

Alexander ab Alexandro, 2 vols. 8vo. Lug. Bat.
Ammianus Marcellinus, fol. Gronov. 1693.
Arrian. Exped. and Tactics, edit. Blancardi, 2 vols. 8vo. 1668.
Brissonius de reg. Pers. Lederlini, 1710. Argentarati.
Busbequius, 8vo. Basil, 1740.
Claudian, Gesner, 2 vols. 8vo. 1759.
Diodorus Siculus, Wesseling, 2 vols. fol. 1746.
Herodotus, H. Steph. fol. 1592.
Josephus, Oxford, 1720.
Mat. Paris, Wats, 2 vols. fol. London, 1640.
Pliny, Nat. Hist. Harduin, 3 vols. fol. 1723.
Tacitus, Elsev, 2 vols. 8vo. 1672.
Strabo, Casaubon, fol. Paris, 1620.
Vegetius, Stewechi, Lug. Bat. 1592.
Xenophon, Leunclav, fol. Paris, 1625.
Voyages de Chardin, 3 vols. 4to.
Gumilla, 3 vols. 12mo. 1758.
Charlevoix, Hist. de la Nouvelle France, 6 vols. 8vo. 1746.
Viagge dè Ramusio, 3 vols. fol. 155[illegible]

AN

ESSAY

ON

ARCHERY.

CHAP. I.

THE moſt ſuperficial attention to Hiſtory will exhibit to our view, many and extraordinary changes which have taken place in the Manners and Cuſtoms of the various People in the World. We ſee a part of Mankind plunged in the extreme of human debaſement, while others poſſeſs the refinements of Literature, moral Excellence, and Eaſe.

The progreſs of knowledge has been compared to a River, which in its courſe paſſing through a ſubterraneous cavern, is there for a time loſt to view, but at a diſtance, again breaks forth, and purſues its current.

Scarce any Science, Art, or Cuſtom, has continued in an uninterrupted courſe for many ages. The *Arts* of Greece and Rome which ſo ſplendidly flouriſhed, remained but a little Time. The *Sciences* of Greece and Rome fared worſe. To what degree of perfection the latter arrived, is not preciſely known, but the barbarity of a few ſucceeding ages effaced the greater part; and it is but a ſhort time ſince this Stream hath again broke forth to Light.

ARCHERY tho' more permanent than many Arts, has ſuffered a revolution likewiſe. The Bow! that weapon of remote

mote antiquity—once ſo deſtructive—ſo bloody—ſo cruel:—that weapon, by which Nations have ſubverted Nations—among us is now known only, as an inſtrument of polite amuſement! Its terrors now are vaniſhed; and a company of Archers at this Day, appear leſs hoſtile than the Gladiators of a fencing-ſchool.

It is not an unpleaſing taſk, to conſider the circumſtances which have given Cauſe to theſe changes.—It is inſtructive, becauſe the Mind, in contemplating the different Scenes which different Ages have preſented on the Theatre of the Globe, cannot fail to be expanded by the knowledge of human-nature; and the extent of thought muſt be enlarged by the variety of Actions which, every moment, would ſolicit the obſervation, through the vaſt Drama in View.—If we allow improvement to be in proportion to the

number of Ideas presented to the Mind, can we point out a subject which, when deeply considered, is better adapted to raise numerous and exalted sentiments, than this I now mention? Can we see the extremes of polished and savage characters without wonder; or can we pass without a desire to trace (however imperfectly) the intermediate links of that Chain which connects them?

We see the arts of War, as well as those which administer to our convenience and pleasure, have, in every Country, borne a near affinity with the State of Civilization. In the ruder Ages of the World, therefore, arms were simple, and the discipline of Troops imperfect; but as the understanding of Men became more and more enlightened, so the Arts of comfort and ease increased — the military regulations became more compli-

cated—weapons of various constructions and power were introduced, till, in the present advanced period, the Science of Tactics is become a deep and abstruse Study.

I shall now, in the prosecution of my subject, take a short view of the different manners of nations, and point out the several degrees of estimation the Bow has commanded in the progress of Society.

During the most distant periods of which any record has been transferred to us, mankind appear to have had much the same general character with that we have presented to our eyes among savage nations. Their manners, utensils, and arms, seem to have had a near resemblance. A philosophic mind may have pleasure in contemplating the human character in

these

theſe ſeveral ſtages, and may endeavour to trace in the conſtitution of Man and the ſituation of Countries, the immediate cauſes which ſeem to influence the Mind and Habits of Mankind. A great deal has been aſcribed to climate,* but it is neceſſary to add the aſſiſtance of other and more forcible cauſes, to explain the origin, or rather the continuance of ſavage Life. Temperature affixes a much more permanent mark on the Figure and complexion of Men, than on the internal ſtructure of the Mind; and while we view a particular ſtature and proportion of the body, in every different nation throughout the whole world, we ſee diſpoſitions by no means ſo provincial. There are paſſions which all uncivilized people poſſeſs

" * In tracing the Globe from the Pole to the Equa-
" tor, we obſerve a gradation in the complexion nearly
" in proportion to the Latitude of the Country."—
Smith's Eſſay on the Variety of Complex. and Figure of Hum. Species: page 12.

poſſeſs in common, and there are others peculiar to civilized Nations.

Men are repreſented in the moſt ancient hiſtories, as leading a life little elevated above that of Brutes:—they ſpent their time in Hunting and Fiſhing, to procure ſubſiſtence:—they were very much detached, and even ſolitary. We read in Scripture* that Iſhmael dwelt in the Wilderneſs and became an Archer; from which I underſtand, he lived by Hunting, and killing animals with his Bow; at leaſt it was his employment, whether for Food or Diverſion is in no ways very material. The ſame kind of Life is mentioned by more recent Hiſtorians, as ſubſiſting in the time they themſelves lived. Herodotus makes mention of a people called Iyrcæ, inhabiting a country far to

"the

* Gen. Chap. 21. V. 20.

the northward of the Palus Mæotis; which people, he ſays, like others near them, live by Hunting: he deſcribes their manner thus;—" Having climbed a Tree, " (of which there are great abundance in " that country) they there lie in wait, " till fortune direct the path of ſome " animal in their way. Each Man has a " dog and horſe at a little diſtance from " this ambuſh, which, in order to be " more concealed are taught to lie upon " their bellies on the ground. When the " perſon in the Tree perceives his Game " at hand, he ſhoots at it with an " Arrow, and if he ſtrike it, immediately " mounting his Horſe purſues it with his " dog till taken.†

Strabo makes mention of a people in Arabia, who practiſe the deſtruction of their prey in exactly the ſame manner.

† Herod. Lib. 4.

ner. § Modern travellers have reported that the Chace is followed much in the ſame way at the preſent time, in Aſia, Africa, and America.

In the temperate and frigid Zones neceſſity will oblige Men to reſort to this kind of Life, and give occaſion to many ſtratagems for the purpoſe of drawing Animals into their power, as the productions of the earth, during the colder ſeaſon of the year, could give no ſuccour to the hungry inhabitant—It is true that the hunting of wild beaſts was not always in order to procure food; for that, indeed, in warm climates, is abundantly poured forth by the vegetable world in fruits and herbs, which afford a nouriſh-

ment,

§ " ἦν δε τις εν βαθει Ενδειρα γυμνητων ανθρωπων κατοικια, τοξοις χρωμενων καλαμινοις και πεπυρακτωμενοις οισοις· απο δενδρων δὲ, τοξευουσι τα θηρια τοπλεον.

Strabo. Lib. 16, *pg.* 771.

See alſo Diod. Siculus, vol. 1. pg. 192—15.

ment, procured with far more eaſe than by the purſuit of animals; but it was more generally followed for the ſake of dreſs*, or ornament; uſes to which ſkins have been applied, from the higheſt antiquity to the preſent day, among all the different people of the Old and New World. We find, from Herodotus, that the Ethiopians covered themſelves with the ſkins of Leopards and Lions: and he ſays, the Scythians ſewed together pieces of leather prepared from human ſkins, and cloathed themſelves with it: and likewiſe, that they ſometimes ſtripped the ſkin from the right hand of their vanquiſhed enemies, and uſed it in ornamenting their quivers.*

It

* "πολλοι δε ανδρων εχθρων τας δεξιας χειρας νεκρων εοντων αποδειραντες αυτοισι ονυξι, καλυπτρας των φαρετρεων ποιευνται. δερμα δε ανθρωπου, και παχυ και λαμπρον, ην αρα σχεδον δερματων παντων λαμπροτατον λευκοτητι. . ."

Herodotus, L. 4, Pg. 277.

It is reaſonable to ſuppoſe theſe ſkins, when firſt applied as covering, underwent no manual operation, but were removed from the back of one brute to that of another. Such cloathing would ſoon become exceedingly diſagreeable, by the ſkin getting hard and ſtiff, ſo that the body of the perſon wearing it would be rendered ſore, by the conſtant exerciſe hunting required. A method of preparing the ſkin would not remain long unſought for, and experiment would ſoon ſuggeſt the way of preſerving the flexibility. Fat from animals has been uſed in ſome countries, in order to do this; and various other proceſſes are found efficacious, in the different places where this kind of garment is uſed.

The preparation of ſkins, it is ſaid, introduced a very important and uſeful diſcovery—I mean the art of forming the

wool, or fur, which was separated in the dressing, into a thread by platting, twisting, and, at length, spining:—An art whose invention has a very early station in history, and appears to have existed, in some degree, in all places. The Scripture mentions it very early*; and the many fables of antiquity authenticate the supposition of its early origin. It is ascribed by the inhabitants of every ancient country to their founder. By the Greeks, Minerva is said to have first taught it,—and Arachne was turned into a Spider for challenging the Goddess in that art. By a kind of weaving, also, very elegant vestments are fabricated from the bark of trees, leaves, and other vegetable productions; which must excite the wonder and admiration of every one who examines them. Captain Cooke has brought to this country specimens of the ingenuity,

* Gen. Chap. 24. V. 23.

nuity, and the exquiſite workmanſhip ſome of the more refined ſavages of the Pacific Ocean are able to execute, without the knowledge of the Metallurgic art.

While the intellectual powers of man, however, remain little improved, the arts cannot attain any conſiderable degree of excellence; and hence it proceeds, that in uncultivated nations they differ but little. People ſituated in circumſtances nearly ſimilar, oppreſſed by ſimilar wants, and unallured by artificial pleaſures, continue cuſtoms and opinions, in an unvaried courſe, through years and centuries;—nor does the Tartar differ from the Scythian, but in name. Every one is an epitome of the whole hord, and every day the picture of a life.

This

This is not peculiar to the rude inhabitants of Asia, travellers report the Arabs to live in a manner very similar to that of the Tartars. They dwell in tents, which, as occasion requires, are transported from place to place; and as their chief care is but to subsist, they often move, and generally pursue that path where plenty invites. With these the old simile is strictly verified,—That life is a journey.* The depths of Africa are found to comprehend people of the same kind; and in America there are others who, in most particulars, resemble the Asiatic and African races. From Hudson's Bay northward to the Pole, the Eskimaux savages inhabit an immense, and almost boundless continent. Associating in small troops, and ranging through

* "Infestum iter vitæ."—*Lucret.*
—Dignum vita traxit iter."—*Claud. Theod. Panig.*

through the foreſts, they preſerve the ſame manners, and the ſame general character of Arabs, but much inferior in underſtanding, and in the poſſeſſion of the comforts of life. The Germans, as deſcribed by Tacitus, differed little from the people before mentioned. They had no towns, but lived in ſmall huts, diſtinct, and in the depths of the foreſt, which at that time overſpread their country, and ſubſiſted by their bow in hunting.*

The paſtoral ſtate ſeems to have ſucceeded that of the hunter;† for as ſome animals were capable of being rendered tame by diſcipline and habit, this method of

* "Nullas Germanorum populis urbes habitari, "ſatis notum eſt, ne pati quidem inter ſe junc-"tas ſedes. Colunt diſcreti ac diverſi, ut fons, "ut campus, ut nemus placuit."——Sola in "ſagittis ſpes."

Tacit. Mor. Germ. Pg. 628 & 629.

† The opinion of Lord Kaims,—I believe.—See his Sketches.

of preserving food, by domestication, would soon be adopted, as affording a more certain resource than the chace. Indeed, a numerous society of people could not exist long unless a reservoir of food was perpetually at hand, to assist in case those who foraged were unsuccessful.

In the present time, the most barbarous nations subsist, in some measure, by this practice, particularly those which are most populous; yet there are others which still lead a life of hunting for prey, as before described, not having the arts of domestication in use, or those of agriculture.*

In this way did the first inhabitants of the world exist; but after some ages, we find

* It is said by Buffon, that at the time America was discovered there was no part of that continent in which the domestication of animals was practised, except in Peru and Mexico.

find, a cuſtom of eating even human fleſh, to have obtained among many nations. What could tempt men to this practice, is not very obvious; but the original cauſe, in ſome inſtances, perhaps, might be neceſſity. Another cauſe has been aſſigned by ſome authors, who obſerve, that human ſacrifices have been as common as the eating of human fleſh; and they ſuppoſe theſe ſacrifices might have induced men to have eaten of the fleſh from the fire, as was common in other ſacrifices. Theſe practices, however ſtrange they may appear, have polluted the altars of almoſt every people under the Sun, in ſome period or other of their hiſtory. In America, Aſia and Africa they ſtill exiſt; and the teſtimonies of the beſt hiſtorians will prove them to have been in Europe before the laws of civilized ſociety were introduced. The Romans found a race of cannibals in a part of this iſland; they were

named the Attacotti, and are ſaid to have lived upon human fleſh:—"When they "hunted the woods for prey, they at-"tacked the ſhepherd rather than the "flock, and curiouſly ſelected the moſt "delicate parts of both males and fe-"males, which they prepared for their "horrid repaſts."* The Druids are ſaid to have eaten human fleſh, and to have ſacrificed the priſoners taken in war, and performed the ceremony with brutiſh cruelty.

Similar atrocities have been common among the Scythians, the Egyptians, Chineſe, Indians, Peruvians and Arabs, in the whole continent of America, and in Africa; and though authentic record is not to be found of all theſe people being in the perpetual practice of eating human fleſh, yet they are, or were all accuſtomed to human

* See Gibbon's Hiſtory, Vol. 2, pg. 530.

man facrifices.† In Scythia, we are told by Herodotus, every hundredth man from their prifoners of war was offered to their God, Mars. A number of piles of wood were erected, and on the top of each an old Scymeter was fixed, as an emblem of the Deity, and to this the victim was facrificed.—Among the Egyptians this practice was common for ages.

In the Dict. Philofophique of Voltaire, we find, that that author had a converfation with fome of the cannibals brought from the Miffiffippi. He afked

† Les Scythes, les Egyptiens, les Chinois, les Indiens, les Phenicians, les Persans, les Grecs, les Romains, les Arabes, les Gaulois, les Germains, les Bretons, les Espagniols, les Négres & les Juifs, ont eu anciennement la coutume d'immoler des hommes avec profusion ; s'il n'est pas possible de prouver qu'ils ont êtê tous Anthropophages dans leur état d'abrutiffement, c'est que cet état a précédé les temps historiques, & par conséquent une nuit obscure a dérobé aux yeux de la postérité une partie de ces atrocités.

Rich. Phil. sur les Americains, Tom I. pg. 212.

a *Lady*, one of them, if ſhe had ever eaten men? and ſhe anſwered him, "That "it was better to eat a dead enemy, than "let him be devoured by beaſts;—that "the conquerors deſerved a preference."*

From theſe few inſtances we may judge what were the cuſtoms which once overſpread the different nations of the earth; —cuſtoms which ſeem to mark the loweſt point of human debaſement, and add a deeper tinge to the bloody page of hiſtory.

Among thoſe people whoſe manners I have endeavoured to ſketch, the Bow was the principal weapon in uſe; and if we pauſe a moment to conſider the imperfection of that inſtrument, we ſhall have

* See also Bib. Universelle, Vol. II. p. 384, where this horrid custom is instanced in a singularly flagrant manner.

have reaſon to think the want of more powerful military ſkill and arms, was one of the cauſes which, in ſome meaſure, operated in keeping mankind in that low ſtate of civilization, they appear to have been in, during a long period of time.

While all nations had nearly the ſame weapons, numbers would have the advantage over the few, and this originally was, and is now the caſe among ſavage hords. But experience would prove the great effect of order and diſcipline, and then the advantage in favour of a diſorderly multitude, would be balanced by the ſkill and order of a smaller number. A continual inequality, and other accidental advantages, would keep men, under theſe circumſtances, in frequent wars; and until experience had taught the uſe of military manœuvres, the victory muſt have been ſometimes on one

ſide,

side, and sometimes on the other, as numbers or fortune determined.

Savages in early ages, we may suppose, were not always at war, they had not established armies, but fought when provoked by their neighbours. This conduct produced frequent, but not incessant battles, and, therefore, each party had an equal advantage by the practice of war, and neither would much excel the other in that art, by their greater experience. But in the course of a few ages, the success which attended some armies, was pursued with vigour, and the love of victory became a passion. It was the perpetual attention to military affairs, added to a continual habit of fighting, which gave Alexander the vast and irresistable power he possessed, over those nations who surrounded them, and who were terrified at the grandeur of an arranged multitude.

multitude. The ſmall inteſtine depradations and hoſtilities, the latter had been witneſs to, preſented no ſplendid appearances, and they fled with precipitation at the ſight. The pleaſure ariſing from frequent victories, would prove a ſufficient inducement to conquerors to proceed on new campaigns, till at length the idea of fixing a government, and defending it, would be introduced to mankind.

During theſe ſcenes of confuſion, how was it poſſible for any ſpark of ſcience to kindle? It could not be, there was no ſociety at peace—Mr. Hume has ſaid, "it is impoſſible for the arts and ſciences "to ariſe at firſt among any people, un"leſs that people enjoy the bleſſing of a "free government;" he might have ſaid till "ſecurity and eaſe were eſtabliſhed."—Where a country is inhabited by diſcordant tribes, no free government can poſſibly

possibly exist, because none are secure in their possessions; and that security and ease, are favourable to the infant arts, may be concluded, in some degree, from the consideration, that in many of the Islands of the south seas, in which, by the construction of nature, mankind must be less liable to interruptions than on continents, the curious arts are brought to much higher perfection, than among any of the native inhabitants of America. On a continent, things must be essentially different. A numerous hord indeed could enjoy a kind of security, while it was surrounded only by others, smaller in number, and detached from each other. But granting they where at peace, the largest hord would be too narrow a sphere for the arts to arrive at any maturity in, as a similiarity of life and necessities would confine the ingenuity to a small

field

field of Invention. It was not, therefore, till armies had subdued, and prudence secured large possessions, that the arts flourished; and this was effected, not by a miriad of Archers, but by the regular and experienced attack of disciplined troops, possessing more improved arms. The uncertain and fluctuating state of the world is well supported by the testimony of history. We see one founding a city or settlement, and another subverting it as soon as formed; and this state continued till, as before observed, some powers, by their superior force, were able to make their possessions durable; and at this period we may date the introduction of the more obvious arts.—During these conflicts, it was unfortunate for those who fell, but it was otherwise with those who survived, because they were taught in a short time, by the conqueror, the art of protecting themselves from the attack of other

powers, who before were their equals. They would imitate the arrangement of troops, and would introduce new arms, which before they were ignorant of.

Thus it is, that while a number of hords or nations poſſeſs the ſame arms, and none more efficacious than the bow— at the ſame time having that ſelfiſh and incurious mind, which moſt ſavage nations poſſeſs,—no large government can be eſtabliſhed, or can the arts ariſe;— neither can there be a hope of it, till, by war, (which is, to be ſure, the moſt expeditious,) or commerce, an intercourſe be opened with nations more improved; thereby, in proceſs of time, imperceptibly acquiring improved manners.—But the true cauſes which have produced theſe great events in the world are hidden; and, like the true ſources of all that knowledge we derive from remote facts, are more and

more

more concealed as time advances; which, like the dark cloud that overcasts the evening, shuts up all beneath it in obscurity.

The age in which undisciplined armies fought with the Bow, the Sword and Pike, occupies an extensive period from the beginning of things. But notwithstanding some additions which were made to the military armaments, no great improvements were made till the time of the Grecian warriors; and the formation of the Macedonian Phalanx may be looked upon as the first grand æra of Tactics.* This we see did not take place till the minds of men were much enlightened, and when an idea of order was regarded by the army as one of the

* See Diod. Sic. P. 83, No. 5. This arrangement was made by Philip, about the CV. Olympiad; that is, 360 years before Christ.

most important advantages. The dispotion of troops prior to this was but seldom regular, and sometimes the confusion of a Northern torrent prevailed.

The introduction of artillery marks the last, and most extraordinary revolution in the history of war; and has for ever erected a barrier, which will protect civilized, from the incursions of barbarous nations.

CHAP.

CHAP. II.

I HAVE intimated that the art of war has in every age had a near affinity with the ſtate of civilization; and have, in the firſt part of this Eſſay, endeavoured to delineate the moſt prominent features of Savage life, and the tactics of uncivilized countries. I ſhall now proceed to ſhew the gradual improvement of arms, and the progreſs various nations have made in their conſtruction, and the ſkill and dexterity they have ſhewn in uſing them.

The period of time in which the Bow was invented is extremely uncertain; but it was undoubtedly one of the moſt

ancient, as well as the moſt univerſal of weapons uſed by men. Nature has given to every animal a peculiar method of protecting and defending itſelf from the aſſaults and injuries of its enemies, and in moſt caſes, among the lower animals it proves effectual. But as there are many different ranks of beaſts ſuperior in ſize, agility and ſtrength, to man, it is by ſkill and ingenuity that he muſt ſubdue, if he diſpute the dominion of the foreſt with them.

Probably the earth was but a very ſhort time inhabited before contention and battle aroſe, both between man and man, and man and beaſt. Claſhing intereſts; without much to reſtrain the violence of paſſion, would ſoon make men reſort to the uſe of arms. Thoſe given by Nature came firſt into uſe, no doubt; but as the ſuperior efficacy of ſticks and

ſtones

ſtones would not long remain unknown, theſe would be employed to aid the other.

A little experience would teach the advantage of a pointed weapon, rather than a blunt one, and hence the introduction of ſwords. Theſe inſtruments, I preſume, were firſt made of hard wood, pointed at the end, and rendered keen on the edges, as is common at this day in ſome parts of the world. The Indians retained this method to a period much later than this I am now ſpeaking of, and rendered their ſpears and lances harder by fire;* indeed, the practice is ſtill continued. But there is much reaſon to believe, that the uſe of fire was not known in ſome of the firſt ages of the

* λόγχας δὲ ἐφόρεον παχέας, μέγεθος ὡς ἐξαπήχεας. ἀκωκὴ δὲ οὐκ ἐπῆν σιδηρέη, ἀλλά τὸ ὀξὺ αὐτῇσι πεπυρακτωμένον τὸ αὐτὸ ἐποίεε.

Arrian Rer. Ind. pg. 556.

the world; for there were ſome countries, which, till lately, were ignorant of the uſe of that element, and therefore the method of hardening inſtruments of this kind by heat, muſt be looked upon as an improvement which did not take place immediately.

As we ſuppoſe the principal uſe of theſe weapons, at firſt, to be that of procuring food and cloathing, it will be aſked, how it was poſſible for a perſon, with no other aſſiſtance than a wooden ſword, to accompliſh the end propoſed? I anſwer, That there are reaſons which may induce us to think, that the cattle of the field were, in the early times of the world, tame, and almoſt without fear, as ſome of them appear at preſent, (though to be ſure theſe are not in a ſtate of Nature); and if ſo, the difficulty of killing them would be little. Some writers have

have ſuppoſed, that animals were originally wild, and fled the preſence of man; but that having been taken when young, and uſed with gentleneſs, they became tame, and were reduced to the diſcipline of the ſhepherd. Others, as I have ſaid, maintain that all animals were primarily tame and gregarious; and that they became wild, in conſequence of the purſuit of hunters endeavouring to take them for food. There are many curious facts recorded, which tend to ſhew how gentle animals have been found in thoſe parts of the world, little, or not at all inhabited. It is ſaid by Kempler, that in the Philippine Iſlands the birds are ſo tame as to be taken in the hand. In the Falkland Iſlands alſo, the geeſe may be knocked down with ſticks. In Arabia Felix, the foxes ſhew no ſigns of fear; and in an uninhabited iſland near Kamſkatka, they ſcarcely turn out of a man's way.*

F It

* See Sketches Hiſt. Man. Vol. I. Chap. I.

If the latter opinion be true, (and it is as probable as the former) we ſhall find no great difficulty in conceiving how a man armed with a wooden ſword, might ſupply himſelf with food and raiment. But this could not continue long. Experience would in a ſhort time teach the unſuſpecting flock to avoid the ſight of him they at firſt beheld with indifference; and the cries of diſtreſs, and the ſight of a fellow-creature ſtruggling in the hands of a man, would raiſe a dread through the whole, which ſoon would be increaſed to greater, and ſtill greater degrees of fear. Recourſe muſt then be had to miſſive weapons; and from this period, whenever it may have been, we may date the uſe of Bows and Arrows.

I am inclined to think mankind, before this æra, muſt have toiled many an unſucceſsful hour amidſt the woods in ſearch of prey,

prey, because the contrivance of this instrument appears to be complicated, and very unlikely to have been early invented.* If we reflect upon this circumstance, it will appear extraordinary how the idea of projecting a rod, in the manner a Bow projects the Arrow, first struck the mind of a savage.

The inventions we find among those nations, who remain nearly in the state of nature, appear in no instànce I can recollect, to be the result of theory or *á priori* reasoning. Their devices are the efforts of very feeble reasoning, and are commonly deduced from some phæno-

 menon

* *See Diod. Siculus. Lib. 3, pg. 192, No. 35, and also Strabo. pg. 177. B. 16.—Where we find that the Arabians, when unsuccessful in the chace, contented themselves with a meal of dry leather roasted.*

" πολὺ δέ εσὶ παρ αὐτοις πλῆθος των ἀγρίων βοων· ἀπὸ δε τῆς τουτων, και των ἄλλων θηρίων κρεωφαγίας ζωσιν· ἐπὰν δέ μηδὲν θηρευσωσι, τα ξηριά δερματα ἐπ' ανθρακιᾶς οπτωντες, ἀρκουνται τῆ τοιαυτη τροφῆ."

menon presented to their view, among natural objects.

In order to illustrate this observation, I shall give wing to my fancy.—

It is reasonable to think mankind would never have been tempted to venture on the sea, had not curiosity, or more probably the desire of food, been the motive.—A savage (ignorant of all navigation) we will imagine, sitting on the beach endeavouring to take fish, perceives, that the further he throws his bait into the water, the greater his success. He his persuaded therefore to walk in, and still finds his good luck to increase, as he advances in the deep water.—Having proceeded to a considerable distance, and as far as safety permits him, let us suppose he sees a large fragment of wood, which in some distant country the wind has severed from

a tree,

a tree, and the river and tide brought gently floating by his ſide. Curioſity, or caprice, induces him to take hold of it; and finding that he receives ſupport, he raiſes himſelf upon it, and feels an unexpected pleaſure in being carried with eaſe and ſafety to the ſhore. Pleaſed and ſatisfied with his adventure, he returns to his companions, who liſten to his tale with ſurpriſe and admiration. He comes the next day to viſit his uſual fiſhing-place, and deſiring the ſituation he was ſo ſucceſsful in before, looks for his favourite tree to carry him; but in vain:—the branch is floated to ſome diſtant place. Invention now awakes.—What muſt he do? 'Tis obvious. He fells the tree which overſhades him, and rolls it to the water's edge;—he mounts it, and regains his former ſtation.

Thus might the knowledge of navigation be introduced into the world. A few experi-

experiments would improve it;—and the obſerving of ſhells ſwimming with their concave ſide uppermoſt, would lead to the idea of *hollowing* the trunk, which firſt was uſed ſolid. The canoe, the long-boat, the man of war may have originated in this ſimple manner.

My intention, in this ſlight picture, is to ſhew that the diſcoveries found among ſavage people, are but the copies of ſomething Nature has thrown before their eyes. It is not to be ſuppoſed, a race of beings ſo unacquainted with the properties of matter, as the barbarous nations muſt have been originally, could make experiments in a theoretic manner: nor would it enter the mind uninformed by example, that a tree ſhould ſwim, while the ſmalleſt ſtone ſhould ſink, in water. The more this idea is attended to, the more it will be found to ſupport my opinion; and it will prove

prove an amusing task, for any one, to follow back the customs of uncivilized nations, to their proper origin in nature.

Let us apply this reasoning to the present point in view, and endeavour to find out something among natural objects, similar to the effect of the Bow.—I know of none; and therefore it strikes me with astonishment whenever I reflect how early this instrument was known, and how universal it became in the most ancient times we have any record of.* But there is not so much difficulty in conceiving how it became general, as how it became in use; for, when once invented, the materials were at hand in every country to fabricate it.

The ancients (who knew a cause for every thing) say, the Bow was introduced by

* There are still a people in America unacquainted with this instrument.—*See Robertson, Vol. II. p. 176.*

by Apollo to mankind.* Perses, the son of Perseus, and Scythes, the son of Jupiter, have the honour of the invention ascribed to them likewise. The latter is said to have instructed the nobility of infant Greece, and to have introduced it into that country. The founder of every nation has the merit of the discovery of the Bow ascribed to him by the inhabitants; which proves, that the true origin is not in the least known.†

Neither the Greek historians or poets have given any fabulous account of the means

* See Diod. Sic. Vol. I. pg. 390.

† Sagittas, ut aliis placet, Perseus Persei filius primum invenit. Ex Plinio.—At Diodorus Apollini assignat. Arcus insuper sagittandique fuisse repertorem Apollinem ferunt. Verum Artabanus, cujus testimonium Eusebius, "*de Præparatione Evangelica*," libro nono, citat, Mosen omnium primum bellica instrumenta invenisse tradit, qui adhuc juvenis in Ægypto (teste Josepho) primam gloriose expeditionem in Æthiopes apparaverit.
Polyd. Vergil. Lib. 2. *Ch.* 11.

means which led to the discovery of the Bow, as far as I remember; which seems to prove how little there is in nature to inspire the idea of such an effect. A Latin Poet, however, has formed a pretty fable to this purpose, and has embellished it with some beautiful similies. The discovery, he says, originated from the well-known tale of the Porcupine, who, when angry, projects his quills on those who provoke him.

* * * * * * * Stat corpore toto
Silva minax, jaculisque rigens in prælia crescit
Picturata seges * * * * * * * * *
* * * * crebris propugnat jactibus ultrò.
Interdum fugiens Parthorum more sequentem
Vulnerat. Interdum, positis velut ordine castris,
Terrificum densâ mucronem verberat undâ;
Et consanguineis hastilibus asperat armos.
* * * * * * * * * * * * * *
Quid labor humanus tantum ratione sagaci
Proficit? Eripiunt trucibus Gortynia capris
Cornua, subjectis eadem lentescere cogunt
Ignibus. Interdum, taurino viscere nervos,

Instruitur pinnis, ferroque armatur arundo.
Ecce brevis propriis munitur bellua telis,
Externam nec quærit opem, fert omnia secum.
* * * * * * * * * * * * *
* * * * quidquid procul appetit hostem
Hinc reor inventum: morem hinc traxisse Cydonas
Bellandi, Parthosque retro didicisse ferire
Prima sagittiferæ pecudis documenta secutos

Claud. p. 236.

It is impossible to look upon this as the true cause which gave rise to the Bow and Arrow, and the poet has illustrated it, as a thought, rather than as a truth. The effect of a quill projected from the back of a Porcupine, by an unseen muscular power, and the effect of a bow projecting an arrow by its expansive and elastic force, are extremely different in their nature; and the transition from the one to the other is so difficult, that we cannot imagine the latter to have been a copy of the former. The most decisive evidence against this supposition is, That the best naturalists,

naturalists confess this property ascribed to the Porcupine, to be fabulous, the animal possessing no such power at any time.

Previous to the construction of the Bow, the knowledge of the elasticity of wood must have been acquired, (supposing the instrument not to be found out by chance) and the method of applying a string, which string must have been before in use. It is true, every twig would have pointed out the property of wood alluded to; but the question is, by what accident the string was first applied to the wood, and the arrow to the string.

It is in vain to make conjectures on this subject; the early periods of the world are hidden in such dense obscurity, that we cannot form any plausible hypothesis, to serve as an explanation.

Let us, however, grant, that the Bow was soon introduced. It was known in the most distant times, and is uniformly mentioned as one of the most common, and most numerous of the weapons made use of, in the wars and conflicts related in the Mosaic History—in the battles described by Homer—and by the writers of succeeding ages in every country.

Of BOWS.

BOWS were first constructed probably from the rough and unformed boughs of trees; but gradual improvements would be added as men became more and more conversant with the knowledge of natural objects. The simple branch would soon be

be rendered more convenient by a little cutting, in order to make the curve regular on both sides the center. There is nothing mentioned in the Old Testament, that I recollect, with respect to the manner in which Bows were made. Homer, however, relates the method in which the Bow of Pandarus was fashioned.

He heard, and madly at the motion pleased,
His polish'd Bow with hasty rashness seiz'd.
'Twas form'd of horn, and smooth'd with artful toil,
A mountain goat resign'd the shining spoil,
Who, pierc'd long since, beneath his arrows bled,
The stately quarry on the clifts lay dead,
And sixteen palms his brows large honours spread:
The workmen join'd and shap'd the bended horns,
And beaten gold each taper point adorns.*

Pope's Hom. B. iv. L. 135.

We

* The horns of the Gortynian Goat are often mentioned as Bows.

* * * * "Alii Gortynia tendant
Cornua." STATIUS.

"Nec Gortyniaco calamus levis exit ab arcu."
OVID MET.

We find, by Herodotus, that it was the custom of some nations to make Bows of reeds, or cane; the Bactri,‡ he says, used some of this kind; as did the Indi.†

The practice of using reeds, or cane, in making Bows, is at this day common in some of the eastern countries, particularly Persia and India; and, I believe, it is the method used among some of the American savages also. But these are materials not well adapted to produce a very elastic and quick weapon; and unless made strong, and difficult to draw, would have but little effect in projecting the Arrow. Indeed, this is commonly the case with almost

‡ Τόξα δε καλάμινα—

Herod. Lib. 7, pg. 463.

† Ἰνδοὶ δὲ εἵματα μὲν ἐνδεδυκότες ἀπὸ ξύλων πεποιημένα, τόξα δὲ καλάμινα εἶχον, και οιςυς καλαμινα.

Herod. pg. 464.

almoſt all the Bows made uſe of by ſavages, and thoſe other nations who are little acquainted with the uſe of tools.

The moſt eſteemed Bows of Perſia, it is ſaid, are made by faſtening two pieces, one of horn, the other of wood, on each other, by means of catgut, which is bound tight around the two, from end to end; by which means they are kept firm together, and cannot ſlip when the Bow is drawn. After this the Bow is covered with the bark of a tree, which is exceedingly tough and flexible, and upon this ſmooth ſurface they paint various ornamental figures of branches, leaves, birds, and other fanciful decorations, generally intermixing gold and ſilver coloured pigments among the reſt. They then cover the whole with a tranſparent varniſh, which protects it from wet and damp.

In

In Persia also, Tartary, and in other parts of the eastern world, the horns of the Antelope are manufactured into Bows, many of which are very excellent weapons. They are generally much shorter than those used in this country, seldom exceeding four feet in length. The two pieces of which these instruments are made, are joined firmly in the center, and are usually ornamented with painting and gilding.—Fig. 4, Plate 1, represents a Persian Bow of this kind.

The Otaheite Bows are very long, and consist of one piece only, in the back part of which there is a groove, containing a pretty thick cord. The cord reaches the whole length, and is fastened very strongly at each end. This contrivance is found very serviceable in assisting the strength of the Bow, and acts in some measure as a spring.

The

The Eſkimaux, bordering on Hudſon's Bay, in North America, make uſe of a Bow, acting on the ſame principle as that of Otaheite. The wood part is about four feet, or four and an half in length, about three quarters of an inch in thickneſs, and two or three inches in breadth, having the ſame dimenſions throughout. At the diſtance of eight or nine inches from each end, there is an abrupt curve; and on the back of this inſtrument there are a number of ſtrings made of the ſinews of deer, drawn tight, and faſtened at the indented parts A and B, (Fig. 6, Plate 1). Theſe ſtrings act in the ſame manner as the cord on the Otaheite Bow, and encreaſe the force of the projecting power very much. It is the cuſtom of the ſavages to ſoak theſe Bows in water before uſing, as it contracts the ſinews, and makes the inſtrument ſtronger. The curves at A. and B. are made by

means of thick pieces of horn, which are faſtened to the wood on the outer ſide the Bow; the wood being firſt cracked and preſſed into an angle. And as the horn is in a figure fitting into this angle, and is bound tight, it confines the wood part in the curves from moving, when the Bow is made uſe of. This Eſkimaux weapon is a very extraordinary ſpecies of the Bow, and unlike all others.

In Lapland, it is ſaid by Scheffer, the Bows are compoſed of two pieces fixed together with glue, one of which is of birch, and the other of fir-tree; which, he ſays, on account of the reſin it contains, is very proper for the making of Bows. They have a caſe likewiſe of birch, in order to prevent injuries from rain or ſnow. The Laplanders, in joining the two parts of their Bows, uſe a peculiar kind of glue, prepared from the ſkins

of

of fiſh. Theſe Bows, by the meaſure given by our author, appear to be extravagantly long.*

The wood of the Palm tree was very much uſed of old for the purpoſe of Bow making, and ſeems to have been the moſt favourite material among many nations.

Metalic Bows, of ſilver, gold, and braſs, are mentioned; but it is probable this ſhould be eſteemed as metaphorical, as they could not be made to anſwer the purpoſe of ſhooting with, in any tolerable degree. When gold and braſs Bows are ſpoken of, I ſhould ſuppoſe theſe inſtruments were of a yellow colour only, reſembling gold or braſs. This kind of

 diction

* Leo Africanus ſays, The King of Tombut had 3000 horſemen, armed with a particular kind of Bow, made from the wild Fennel tree.

See page 325, *Leo Afric. Deſcription of Africa, French tranſlation, Fol.* 1556.

diction is exceedingly common in all writings. We, in our days, have heard of people with *brazen-faces*. Not because such faces were actually made of brass, or because they were yellow, but because they possessed another property which that metal has in common with others. Bows of steel are mentioned in the book of Job, (Ch. xx. v. 24.) "The Bow of steel shall strike him through." But we are ignorant how they fashioned them.*

The modern Bows used in England are made of several kinds of wood. Yew has been by far the longest in use, but it is not so much esteemed at present as some other kinds. The foreign woods, imported

* Bows of steel tempered by skillful workmen have been tried in England, but it appears that the elasticity of metal is far more slow and sluggish than that of wood; and unless the Bow is made strong, has but little projectile effect. Metallic Bows also are of much greater weight than others of the same power.

imported into this country for the purpose of dying and cabinet making, are some of them very proper for the making of Bows, such as Fustic, Rose-wood, &c. and there is a kind which bears the name of Cocoa-tree, which answers pretty well for making strong Bows. The modern Bows are constructed of two pieces, a body part, generally of elastic, often of brittle wood, and a thin strip of Ash, Elm, or Ickery, which is firmly fixed on the back of the other. This back not only prevents the body from splitting, but at the same time renders the Bow infinitely more difficult to draw.

CHAP. III.

Of the Figure of the BOW.

THE Bows of different nations preſerve a very near reſemblance to each other; it is evident from the principle upon which they act, that this muſt be the caſe.

The firſt kind is the Apollo's Bow. It is this we generally ſee in the hands of the Grecian warriors, which are delineated in ſculpture, and on ancient medals. The figure of it is certainly the moſt beautiful and pictureſque of any; and perhaps

it is for this reason we see it so often represented by painters and sculptors. It is composed of three different parts. The two end pieces, which act as springs, and a third, into which the other two are fixed. This third piece being between the other, is the part by which the Bow is held, when made use of. The springing parts are thick towards the middle, and taper from thence to the points where the string is fastened. These points were called Κορωνη, and were often of gold, or silver. The springs of the Bow are curved, not unlike the horns of some of the East-Indian Goats; and as we read that the horns of animals were sometimes used for these parts of the Bow, perhaps the natural figure gave a model for the Bows which were not made of horn. But I am inclined to think, that poets and painters have made these instruments more beautiful than any Bowyer ever attempted.

attempted, both in figure and all other attributes.

Another ſpecies of this weapon is made of one regular curve, having no ſeparation in the middle. We do not ſee this kind often repreſented in the tablets of antiquity, although of the moſt natural figure, and of the moſt ſimple conſtruction. The Bows which are at preſent in uſe, and which formerly were uſed in England, are of this ſort I mention. Bows on both theſe principles are uſed in ſavage nations, but the latter is the more common. The Muſeums, and many private collections contain Bows of each ſort, which were brought to this country by the ſeveral navigators who have viſited the Pacific Ocean, and the remote parts of Aſia and America. The inſtruments of this kind made by the inhabitants of

Asia, very much resemble those of America, and are often of the same materials.

The modern Bows made in three parts, are generally of elastic wood. The ends are composed of small pieces, tied together, and fixed in the handle, in the middle. Cane is often the substance employed; pieces of which are bound by a very strong kind of ligature, so as to compose very stiff, though not very elastic weapons.

The other sorts, composed of one or two parts, which go the whole length without any break, are usually much longer than the former kind. I have seen one, made of dark-coloured close-grained wood, having a piece of a different kind inserted in the back of it. This was done by means of a groove and dovetail, in the manner the slides of a common

carpenter's

carpenter's rule are fitted in. There was no binding on it, except at the ends, and it seemed to be made with great art, but it was not strong. I do not recollect to have heard what part of the world it came from.

The Grecian Bow is said to have been made in the figure of the Sigma in their alphabet.* The Bow used by the Scythians will pass under the same character. And as the practice of Archery was introduced from Scythia into Greece, the Bows of each, perhaps, were not very different from those of the other. I have not been able to find any particular relation in what manner the Bows used by the

* La figure de l'arc est assez uniforme dans les monumens que nous restent. Il est à deux courbures, en sorte que le milieu de l'arc par où on l'empoignoit en tirant, est en ligne droite. L'arc des Grecs avoit la figure de Sigma.

Montf. Vol. IV. pg. 69.

Greeks were made, different from thofe of other nations. But by the figures on medals, and elfe-where, they do not appear (when ftrung) to have been very diffimilar to the Scythian, or Mæotian, though writers fpeak of a remarkable incurvation the latter had.*

"He went armed with a crooked Bow, after the
"Mæotian (or Scythian) Fafhion."

And another Poet fays:—

(Minerva) aimed and fhot with a Mæotian Bow.
"This crooked Bow the God-like Hercules,
"Whofe Arrows, when they flew, would always kill
"Firft ufed."

In both thefe quotations the Scythian Bow is called crooked, becaufe it was fo in a degree greater, than the Bows of other countries. This incurvation is faid

to

* See Potter's Archœologia.

to be ſo remarkable as to repreſent a ſemi-circle, or half moon. Hence the Shepherd, in Athenæus, ſays Potter, being to deſcribe the letters in the name of Theſeus, and expreſſing each of them by ſome appoſite reſemblance, compares the third to the Scythian Bow, meaning not the more modern character Σ, but the ancient C, and bears the third place in ΘΗCΕΥC.*

I have conſulted the plates in Montfaucon, in order to diſcover the difference between the Grecian and Mæotian Bows; but

* The words in Athenæus are theſe :—

> Γραφῆς ὁ πρῶτος ἦν μεσόμφαλος κύκλος·
> Ὀρθοί τε κανόνες ἐζυγωμένοι δύο
> Σκυθικῷ δὲ τόξῳ τρίτον ἦν προσεμφερές·

Exiſtimant autem Viri docti tertiam hanc litteram in nomine Theſei, quæ eſt σῖγμα ita pinxiſſe vetuſtiores Græcos, quemadmodum C latinum. Verum omnino eos errare exiſtimo. Quamvis enim non ignorem ita hanc litteram expreſſam fuiſſe olim, in antiquioribus tamen monumentis aliter pingitur, hoc nempe modo Σ.

Voſsii Obſ. ad Melam, pg. 412.

but there is nothing which points out a very great dissimilarity. Among the Romans, in a combat against the Sarmatians, plate 52, vol. iv. of this work, there are some figures drawing the Bow, which Bows are infinitely more curved than any of the Scythian I have seen. Indeed, all Bows eagerly drawn, nearly form semicircles.

But let us see if a true and marked characteristic cannot be found.

The figure of a modern Tartar Bow will, I think, enable us to point out what is intended by this peculiar incurvation, and render the matter intelligible. The figure I allude to is drawn in Plate 1, Fig. 5, and is nearly the appearance of an unstrung Tartar Bow. This has a remarkable incurvation backwards, and is extremely different from any other species

of

of Bow.* The ends, which in this representation are inflected, are drawn on the oppofite fide, when ftrung; and in that cafe the Bow does not appear very different from others. This curve backwards is the circumftance, as I imagine, which characterifed the ancient Scythian Bow. Hence we may conclude, that when authors fpeak of the peculiarity belonging to this weapon, it is to be underftood of it, the figure it prefents when unftrung, and not its form as feen in the hand of one fhooting.

The Bows ufed by the Daci, a people formerly inhabiting that country, now called Tranfylvania, and with whom the Romans had frequent contefts, were made in a very beautiful curve, and ornamented at one end with the head of a Swan, and at

* The Bow from which the drawing is taken, is of horn, and is very ftrong.

at the other with that of a Dragon; because these figures were the common ensigns used by that people in battle. (See Plate 1, Fig. 2.)

There is a view of one of these Dacian weapons in the hand of a warrior, pictured among a contending group in Montfaucon. The lower part of the Bow is hidden by the interposition of another figure, but the upper end is distinct, and the Swan's head clearly visible upon it. The Saxons seem to have been in the practice of ornamenting one end of their Bows in this manner also. (See Plate 1, Figure 8, a Saxon Bow, from Strutt.)

I shall take the form of the Roman Bow (See Plate 1, Fig. 1) from a statue given by Spon and Montfaucon.

This statue represents a Master of Archery, and one who instructed in the art of managing the Bow.

The

The figure is reprefented without cloathing to the waift, and refting the right hand on the upper end of the Bow; the lower end of which is on the ground. This ftatue, when found, was placed on a pedeftal, bearing the following infcription:—

DM
T FLAVIO EXPEDITO
DOCTORI SAGITTAR:
FLAVIA EUPHROSINE
ET ATTICA FILLIÆ
PATRI. BM.

The Bow is a figure feldom to be feen among the arms and trophies, ftruck on Roman medals. The reafon for which is, perhaps, that it was efteemed unworthy a place among the proper military weapons, becaufe not ufed by the regular troops. The Sagittarii and Funditores were auxiliary men, and were not held in high eftimation by the legions.

The Amazonian Bow does not appear to have any very particular character different from the other Bows of three pieces; in general, however, it appears of ſtronger make; but perhaps this may be a compliment to thoſe ladies from the ſculptors. Fig. 3, Plate 1, is a copy from one in the hand of an Amazonian woman, in Montfaucon.

The modern Long-bow is well known, and is better underſtood from a figure than a deſcription. The only difference in thoſe formerly in uſe, and what are at preſent made is, that the ancient ones were ſometimes of a ſingle piece, but the modern ones have a thin piece of Aſh joined, as I have already deſcribed. Plate 1, Fig. 7, is the modern Bow ſtrung. It may be ſeen, that in the middle there is a binding, in order to enable the ſhooter to hold the inſtrument ſteady, and at the

ſame

ſame time to prevent the hand being hurt; our old Archers had no ſuch defence; but held their Bows well beſmeared with wax, in order to fix it in the hand.

Bows, if we believe hiſtorians and ſculptors, were much ſtronger formerly, in ſome countries, than they are made at preſent. The figures of theſe inſtruments on ancient fragments, are always much ſhorter than we imagine they ought to be. Some are ſcarcely longer than a man's arm, and very few exceed that meaſure in any great degree. But the thickneſs of them is proportionately greater. We find, however, there were people who uſed Bows as long as thoſe made in England at preſent. Arrian ſays, the Indian infantry held Bows whoſe length was equal to the height of him who bore it; and this ſtandard ſeems

to have been approved by other nations. The Irish statue of Edward IV. says, "That the Bow shall not exceed the height of a man; and that the Arrow shall be half the length of the Bow."† The Carducian Bow was three cubits long, the Arrows two.§ Herodotus says, the Bow used by the Ethiopians was of Palm tree, not less than four cubits; and they shot with extremely long Arrows. We cannot form any exact conjecture on the degree of power these instruments possessed, as the length of a Bow has no influence in increasing the strength; rather the contrary. We must conclude they were of prodigious force, however; and the account of Zenophon, whose soldiers felt the Arrows of

* τοξον τε εχουσιν ισομηκες τω φορεοντι τὸ τοξον.
Arrian. Rer. Ind. pg. 541.

† See Mr. Barrington's Essay, Archæologia. vol. vii.

§ The cubit was about a foot and an half of our measure.

of the Carducians during the retreat of the ten thousand Greeks, corresponds with this opinion.—He says, "Here fell a brave man, Cleonymus, a Lacedemonian, who was wounded in the side by an Arrow, that made its way both through his shield and his buff coat." —Again,—"Here fell Basias, an Arcadian, whose head was quite shot through by an Arrow."* Many other instances of the vast force with which ancient Bows threw Arrows might be produced, but it is not necessary, as the fact is well allowed.†

Some

* This strong shooting continued among the descendants of the Carducians till the time of M. Crassus, whose soldiers, Plutarch says, were slaughtered by their Arrows in vast numbers, as no part of their armour could withstand the force of them.

See Plut. in M. Crassus's Life.

† We find, in the Bib. Orient. par D'Herbelot, "that one Aresch, le meilleur Archer de son tems tira une Fleche, que fu marquè pour ètre reconnue, du haut de la Montagne de Damavend jusque sur les bords du fleuve Gihon." I suppose this wonderful man was the Eastern Robin Hood.

Some descriptions we have of Bows made use of in foreign nations, appear to be very extraordinary; and I shall quote a passage from a traveller of distinguished rank and judgment, which represents the practice of Archery in Persia, at the time the author made his residence there. "The young Persians," says he, "learn to shoot the Bow; the art of which consists in holding it firm, drawing, and letting go the string smoothly. At first they practise with a weak Bow; and afterwards, by degrees, with those which are stronger. The persons who give instructions in this art, direct the young pupils to shoot with ease and agility, in every direction, —before them, behind, on either side, elevated in the air, or low to the ground; in short, in every different posture.*

Some

* We are told, the Scythians could use the Bow in either hand with indifference. "Scythis autem adeo

Some of their Bows are exceedingly ſtrong; and the method they make uſe of to know their power, is by faſtening them to a ſupport driven into a wall, and ſuſpending weights to the ſtring at the point where the Arrow is placed, when going to ſhoot.† The ſtrongeſt require five hundred pounds weight, to draw them up to the Arrow's point.§

When

adeo ſagittarum ſtudium fuit, ut dextra ac ſiniſtra pariter jaculari, et vice in alterna in hoſtes mittere, ſublato diſcrimine callerent."

Alex. ab Alex. vol. ii.

† We are told that Apollo, by obſerving the different tones given out by the ſtring of his Bow, while trying its power by weights, diſcovered the notes of muſic, and conſtructed the Monochord, which he formed in the ſame figure as the Bow uſed by his ſiſter Diana.

§ Lord Bacon ſays, "The Turkiſh Bow giveth a very forcible ſhoot; inſomuch as it hath been known, that the Arrow hath pierced a ſteel target, or a piece of braſs of *two inches* thick!!!"

See Nat. Hiſt. Expt. 704. vol. iii.

Theſe ſeem marvelous facts; but ſhould one dare to contradict ſuch high authorities, it might do greater violence, perhaps, to good manners, than truth.

When the pupils can manage a common Bow, they then have another given them, which they make heavier and heavier, by means of large iron rings which are placed on the ſtring. *Some of theſe Bows are an hundred weight.* The pupils draw, ſtring and unſtring their Bows, while they leap and move about: ſometimes while they ſtand on one leg,—ſometimes on their knees, or while running about; which laſt action makes a great and diſagreeable noiſe by the clinking of the iron rings.

The inſtructors judge this exerciſe to be well performed, when the left hand extended at length, ſupports the Bow, firm and ſtrong, without ſhaking; and the right draws the ſtring, with the thumb to the ear.—In order to prevent the effects of the Bow-ſtring, they wear a circular ring, which projects an inch within,

within, and half an inch on the outſide of the thumb. It is on this reſt that the ſtring hangs when it is drawn up in ſhooting; and it is made of horn, ivory, or jadde, which is a kind of green alabaſter. The king has ſome of theſe rings of a bone, coloured yellow and red, which grows, as it is ſaid, like an hoop, on the head of a large bird in the iſland of Ceylon.

When the young Archers underſtand how to manage the Bow well, their firſt exerciſe is to ſhoot into the air as high as they can. Afterwards they ſhoot point-blanc. The art of doing this is not only in hitting the mark, but it is neceſſary alſo that the Arrow go firm and ſteady. Laſtly, they learn to ſhoot with very heavy ſhafts, and with great force.*"

* Voyages de le Chevalier Chardin, Tom. II.

Such is the Archery of the Perſians; and ſuch the prodigious ſtrength of their Bows, which to us, who are unaccuſtomed to ſee ſuch efforts of human power, ſeem almoſt incredible; and perhaps by ſome may be eſteemed among thoſe ſtories of hiſtory which merit little credit. Travellers in all ages have been reproached with exaggeration; but in ſome caſes it would be well if their relations were judged by a train of reaſoning, and not by the deluſive criterion of apparent probability. But let us reflect a moment on the power of early habits, and training the body from infancy, to endure the toils of labour and fatigue;—we ſhall then be induced to extend our conceptions of *muſcular* force to a much greater ſcale than at firſt ſight appeared reaſonable.

It is evident that in the military operations of the preſent day, perſonal valour

and

and bodily ſtrength are by no means ſo neceſſary as formerly. The management of the muſket requires no great power;—but when the ſword and javelin were the inſtruments commonly in uſe, a ſtrong man had greatly the advantage over a weak one, which is not now the caſe. This was the reaſon why bodily ſtrength was eſteemed and cultivated of old, among the ſoldiery. We do not, at this day, ſee ſo many inſtances of muſcular power, becauſe men are trained in the gentler exerciſes of modern tactics, rather than the harraſſing fatigues of Campus Martius.

If we conſider the great weight of every part of the armour anciently in uſe, we ſhall be led to think, that under ſuch an incumberance, the wearer could have but very little command over the motions of his body,—but this was far

from being the caſe. Thoſe helmets, cuiraſſes and ſhields, which to a modern would prove inſupportable, and which would gall the firmeſt fleſh to the quick, were by the Roman veteran worn with eaſe through his long and toilſome campaigns. A common ſuit of armour, we are told, weighed about ſixty pounds; but ſome far exceeded even that. Plutarch, in his life of Demetrius, ſpeaking of one Alcimus, ſays, he wore a ſuit which was ſix ſcore pounds; but this man was a giant in ſtature, and one of the ſtrongeſt men in the world. Indeed, we find from hiſtory, that the uſual armour of ſome nations was of much greater weight than that uſed by the Romans; but I do not pretend to ſay they carried it with eaſe and pleaſure; on the contrary, Tacitus ridicules the ſoldiers of Gaul on that account. "They were ſo armed," ſays he, "that they were only

only able just to move, without the power of doing injury to their enemies, or the possibility of being injured by them; and if they were thrown on the ground, remained there under the pressure of their arms, without the ability of rising."* But it was not so with the Romans: Cicero says, their arms were but as limbs, they were so accustomed to carry them.† The troops under Marius are said to have marched the distance

* At the battle of Fornova, under Charles VIII. there were a number of Italian knights, who, though overthrown, could not be killed, on account of the thickness and strength of their armour, till broke up, *like huge lobsters*, by the servants and followers of the army, with large wood-cutters' axes, each man at arms having three or four men employed about him.

See Philip de Comines, B. 8, C. 6.
and Grose, Vol. I, pg. 106.

† See Montagne's Essays, Tom. II. pg. 130; and Cicero Tuscul. Lib. II. pg. 157. " Nam scutum, gladium, galeam, in onere nostri milites non plus numerant, quam humeros, lacertos, manus: arma enim, membra militis esse dicunt.

tance of five leagues in five hours, and ſometimes ſix, under the weight of ſixty pounds of arms each.

This docility in ſuſtaining burthens was unqueſtionably owing to the conſtant habit, and unremitted attention paid to the military diſcipline. Twice a-day the legions were drawn out, and performed their long and compleat exerciſes: nor was age, or knowledge allowed to excuſe the veterans from their daily repetition of what they had completely learned.§ In the midſt of peace, the Roman troops familiariſed themſelves with the practiſe of war, and engaged with vigour and animation.‡

What

§ It may be obſerved, that the arms uſed in exerciſing were double the weight of thoſe uſed in action.

‡ See Gib. Hiſt. Vol. I. pg. 14.

What we have here remarked will in every part apply with exactneſs to the practiſe of Archery. An early beginning, and conſtant uſe will make a nervous arm, and increaſe the muſcular power to a degree not to be limited.

It was on this principle the military exerciſes in Perſia were inſtituted; and they appear to have been even more ſevere than thoſe of the Roman legions; and therefore we may ſuppoſe, that the difficulty of ſhooting ſtrong Bows was as much diminiſhed, in the one caſe, as that of ſuſtaining heavy armour, in the other.

The Cretans, who have been highly celebrated for their ſkill and power in the management of the Bow, were kept with the ſtricteſt care to the perpetual

practiſe

practise of Archery;* and there is reason to think all those nations and people who have rendered themselves expert in this art, have adopted the same mode of education.

* Arcu quoque & sagittis plerumque Cretensibus et Cydoniis exactissima curâ milites instruebantur, sicut apud Græcos palæstra.

Alex. ab. Alex. Vol. I. pg. 151.

In America, according to Gumilla, the boys are not suffered to eat their victuals till they have first hit them with an Arrow from a distance.—" Les Indiennes exercent aussi leurs enfans à tirer la flèche, ne leur donnant jamais à manger qu'ils n'ayent attrapè d'une certaine distance la viande où la fruit dont ils ont envie, avec la pointe de cette arme."

Gumilla, Vol. II. pg. 283.—
See also Charlevoix, Vol. VI. pg. 36.

CHAP.

CHAP. IV.

HAVING sufficiently described the figure, and degree of power which the Bow has had in historical ages, I shall now say a few words with respect to the different ways of managing that instrument, and point out the several attitudes and postures which have been adopted and practised by various nations for that purpose.

Method, in some instances, is well known to effect what greater force cannot; and there is nothing in which this observation can be exemplified more strongly, than in shooting the Bow.

 Every

Every perſon who underſtands the nature of Archery, will ſee the truth of this aſſertion. A ſimple experiment will prove it, in a very ſatisfactory manner. Let an Archer, who in ſhooting has learned to draw the Arrow to the eye or ear, draw it to his breaſt, and he will find, that the Bow he in the former caſe could draw with eaſe, will, in the latter, appear infinitely ſtronger. Mr. Barrington ſays, "That ſeveral years ago there was a man named Topham, who exhibited moſt ſurpriſing feats of ſtrength, and who happened to be at a public-houſe at Iſlington, to which the Finſbury Archers reſorted after their exerciſe. Topham conſidered the Long-bow as a play-thing only fit for a child; upon which one of the Archers laid him a bowl of punch, that he could not draw the Arrow two-thirds of its length. Topham accepted this bett, with the greateſt

greatest confidence of winning; but bringing the Arrow to his breast, instead of his ear, he was greatly mortified by paying the wager, after many fruitless efforts

Notwithstanding the evident disadvantage of drawing to the breast, rather than the ear, yet it seems to have been the most general practise in early periods. We know one nation is said to have derived its name from that circumstance:§

 This

* See Essay, pg. 64. Archæologia.

§ Virgines in eundem ipsis morem, non otio, neque lanificio; sed armis, equis, venationibus exercebant, *inustis* infantum dexterioribus mammis, ne sagittarum jactus impediretur: unde Amazones dictæ sunt.

Justin, Ch. IV. Lib. II. and
Diod. Siculus, Vol. I. pg. 156.

The derivation of *Amazon*, from α μαζος, is by no means agreed upon. This nation is said to have been a kind of nunnery, wherein a society of women lived without intercourse with other states, or with men; and

This method of drawing to the breast was continued in use for many ages; and it was esteemed a great improvement when the Roman auxiliaries were instructed

and hence the word has admitted another origin, ὁμαζῆν, living together, in reference to their seclusion. That a society of women should exist alone, is impossible, but the fact is, that the women undertook the active labours, whilst the men submitted to those usually performed by women. The ancient Egyptians according to Herodotus, had nearly the same manners, and we need not pass our own shores to see women engaged in all the toils and labours of agriculture, as well as those of domestic employments, while the men remain idle at home.

This circumstance appears to me more unusual than unnatural; for I cannot avoid being of opinion, that in a state of nature, the sexes differ but little in bodily power. It is so with other animals. The appearances in polished society will argue nothing contrary to the supposition, as habits of inactivity, formed by the force of custom, exhibit the abused, not the cultivated faculties of the human frame. It is with equal propriety that it might be urged, the intellectual faculties of the one sex are inferior to those of the other; but there are few at the present day who do not perceive, that it is an unjust, though fashionable education, which enervates the mental abilities of women, and not the hand of nature. Strength and knowledge are in a great degree artificial,

ſtructed to draw the right hand to the ear. We read in Procopius, when deſcribing the Archers in the Roman army, "That they ride with eaſe, and ſhoot their Arrows in every direction,—to the right, the left, behind, or in the front, while in full ſpeed;—and as they draw the Bow-ſtring to the right ear, they drive their Arrows with ſuch rapidity, that it is certain death to him on whom they fall; nor can the ſtouteſt ſhield or helmet reſiſt the violence of the ſtroke."* On all the medals and baſſo-relivos which are copied by the moderns, the figures are repreſented as drawing the hand to the breaſt. There are ſome who may recollect the attitude which Cupid is generally pictured in when ſhooting, to be the ſame we now mention; and he was a *celebrated* Archer.

But

* Procopius, pg. 7.—Fol.

But of the different methods that have been deſcribed in hiſtory, by which Archery has been practiſed, that in uſe among the Ethiopians, and a few other nations, is undoubtedly the moſt extraordinary. We read, that theſe people, inſtead of holding their Bow in the left hand, as is the uſual cuſtom, drew it by the aſſiſtance of their feet. The fact is recorded by Diodorus Siculus,* and Strabo: the latter of whom informs us of a curious expedient of this pedeſtrial Archery, uſed by the Ethiopians in hunting Elephants. They employ, in ſhooting their ſtrong Bows, three perſons; two of whom ſupport the Bow by preſſing their feet againſt it; while a third is

* — καθοπλίζονται δε αυτῶν ο. μεν ασπισιν ωμοβοιναις και μικροῖς δοραсιν, οι δὲ ἀκοντίοις αναγκυλοις. ἐνιοτε δὲ ξυλίνοις τοξοις τετραπήχεσιν, οἷς τοξεύουσι μεν τῷ ποδι προσβαινοντες.

Diod. Si. Lib. 3.

is engaged in drawing the ſtring and directing the Arrow.†

Arrian reports, that the Indians ſhot their Bows by the aſſiſtance of their left foot, being enabled, by this means, to draw the ſtring very far backwards.§

Zenophon, ſpeaking of the Carducians, ſays, "They had Bows which were three cubits long, and Arrows of two cubits.

† — ἡ δὲ τοξεια δια τριων ανδρων συντελειται, των μεν κατεχοντων το τοξον, και προβεβηκοτων τοις ποσι, τȣ δ' ελκοντος την νευραν.

Strabo. Arab. Lib. 16—*pg.* 772.

Alii tutiore genere, ſed magis fallaci. intentos ingentes arcus defigunt humi longius. Hos præcipui viribus juvenes continent: alii connixi pari conatu contendunt, ac prætereuntibus ſagittarum venabula infigunt, mox ſanguinis veſtigiis ſequuntur.

Plin. Lib. 8. *ch.* 8. *pg.* 439.

§ — καὶ τȣτω κατω ἐπὶ τὴν γῆν θέντες, και τῳ ποδι τῳ ἀριστερῳ ἀντιβαντες, ȣτως εκτοξευȣσι, την νευρην, ἐπὶ μεγα ὀπισω ἀπαγαγοντες.

Arrian. Rer. Ind. pg. 541.

cubits. When they made use of their weapons, *they placed their left foot on the bottom of the Bow,* and by that method they drove their Arrows with great violence, piercing through the shields and corslets of his men; and as the Arrows were extremely large, were used by them as javelins.*

It is recorded of the Arabians, that they used their Bows in the manner above alluded to, by the help of the foot.†

The

* [illegible Greek text]

Zenophon. Exped. Cyr. p. 322. D.

† [illegible Greek text]

Suidas—Arabes.

Vide also—[illegible Greek text]

Agatharchides—inter Geographic. Script. minores. Oxon. 1698. 8vo.

The reader will perceive that the paſſages I have quoted in the notes are extremely indiſtinct and obſcure; more particularly that from Arrian, from Zenophon, and from Suidas. Suidas, indeed, ſeems to intimate that the Arabians drew the Bow with their feet applied to the ſtring, inſtead of their hands; but certainly the paſſage is corrupt, as the fact is impoſſible. Nor can I explain the ſenſe of theſe ſeveral authors, unleſs it be underſtood, that one foot was made uſe of as a reſt for the middle part of the Bow, while the ſtring was drawn back by the hands. This appears to agree well with the expreſſion in Arrian, "τω ποδι ἀντιβαντες;" and I have not the leaſt doubt, but that this was originally intended by the hiſtorians, though the different mutilated texts convey the idea in a very concealed manner, as they now ſtand.

If we have recourse to the commentators on these passages, we shall find no ray of light thrown upon them, by which the sense becomes more conspicuous; for they, being men more conversant with books than Bows, have glided over these parts without appearing to see the impropriety of them.†

Mr. Barrington, in his Essay, inserted in the Archæologia, relates a tradition, that one Leigh, an attorney, at Wigan, in Lancashire, shot an Arrow a mile at three flights. He is reported to have sat on a stool, the middle part of his Bow being

† The passage I have quoted above from Diodorus Siculus, is thus *explained* by the notes.—" Utebantur enim barbari illi arcubus ternum fere cubitorum; quos ut intenderent, *humi collocabant*, pedeque admoto sinistro; nervum summis viribus adducebant." If the reader be an Archer, I will ask him, How far he imagines a Bow would carry, if placed in the situation here named? In my opinion, the Bow would fly as far as the Arrow, but in an opposite direction!

being faſtened to his one foot, to have elevated that five and forty degrees, and to have drawn the ſtring with his two hands applied to it.

I cannot avoid being of opinion, that this fact fully illuſtrates thoſe before-mentioned; and conceive, that the real method practiſed by the nations before-named, was exactly on the principle of this curious experiment.

In the time of Henry VIII. a droll circumſtance happened, which, if I underſtand the affair rightly, has ſome relation to this pedeſtrial Archery. I allude to this paſſage in Hollinſhead, viz. "Now at his returning, (Henry VIII.) many hearing of his going a Maying, were deſirous of ſeeing him ſhoot; for at that time his Grace ſhot as ſtrong, and as great a length as any of his guard. There

came to his Grace a certain man, with Bow and Arrow, and desired his Grace to take the muster of him, and to see him shoot. The man put one foot in his bosom, and so did shoot, and shot a very good shot. Whereof not only his Grace, but all others greatly marvelled. So the King gave him a reward for so doing. Which person afterwards, of the people and the court, was called, *Foot-in-bosom*." *

How a man could shoot, or, indeed, how a man could put one foot into his bosom, I am at a loss to conceive. More probably this Archer must have put his knee into his bosom, and have shot his Bow by pressing it with his foot, which would in this case project forwards.

The

* Hollinshead, vol. iii. pg. 806.

The obſcurity in which all the facts relating to pedeſtrial Archery is enveloped, induced me to try a few experiments, and to my ſurpriſe found the poſture leſs inconvenient than may be imagined. If a perſon ſit, and elevate the left leg, turning the toe a little inwards, and place the middle of the Bow againſt his foot, at the ſame time preſſing it with the left hand cloſe to the ſhoe, to prevent it ſlipping, he will be able to draw a very ſtrong Bow without much difficulty; and I have no doubt, but that by practiſe the art of aiming with tolerable exactneſs might be acquired. This circumſtance affords me an additional reaſon to ſuppoſe the Ethiopians, Arabs, &c. ſhot in this poſture, as I have before intimated. I cannot, however, recommend this attitude to the *Panciuti!*

We

We find, that anciently there were five different ways made use of by the Archers of various countries in drawing the Bow, viz. 1st. παρα μαζον, (by the breast.) 2d. παρα δεξιον ωτιον, (by the right ear.) 3d. παρ ωμον, (by the shoulder.) 4th. *Ab Inguine*, which is said to be familiar to the Parthians.

"Illi vergatis jaculantur *ab inguine* bracis."
Proper. Lib. IV. El. 2.

"Vulnera seu Parthi ducentis ab inguine ferrum."
*Persius. Sat. V.**

5th. is the method wherein the foot is used instead of the hand.‡

It is impossible to give a written description in what manner the body should be held, while shooting in the common way,

* This fourth article rests on a very questionable basis, as the lines are disputed by the critics; it is intelligible with great difficulty in every sense.

‡ See Am. Marcel. pg. 320.

way, as it varies in almoſt every inſtance. It is much leſs difficult to direct what attitudes ſhould be avoided. For there are many more ways of doing wrong than right. Aſcham has delineated the ſeveral awkward and inelegant poſitions in which the Archers in his time ſhot; and as it would be impoſſible for me to paint them in my own language ſo well as he has done, I ſhall copy the paſſage.

" All the diſcommodityes which ill cuſtom has graffed in Archers, can neither be quickly pulled out, nor yet ſoon reckoned by me, there be ſo many. Some ſhooteth his head forwarde, as though he would byte the marke; another ſtareth with his eyes, as though they ſhould flye out; another winketh with one eye, and loketh with the other; ſome make a face with wrything thyr mouth and countenaunce ſo, as tho' they

they were doing you wotte what; another blereth oute his tongue; another byteth his lippes; another holdeth his necke awrye. In drawinge, som set such a compasse, as though they would turne about, and blesse all the field; other heave thyr hand now up now downe, that a man cannot discerne whereat they would shoote: another waggeth the upper end of his Bow one way, the nether end another way. Another will stand pointing his shaft at the marke a good while, and by and by, he will geve him a whippe, and away, or a man witte. Another maketh such a wrestlinge with his gere, as though he were able to shoote no more as long as he lived. Another draweth softlye to the middes, and by and by it is gone you cannot know howe. Another draweth his shaft low at the breast, as though he would shoote at a roving marke, and by and by

by he lifteth his arme up pricke heyght. Another maketh a wrynchinge with his back, as though a man pinched him be-hinde. Another coureth downe, and layeth out his buttockes, as thoughe he would ſhoote at crowes. Another ſet-teth forward his left legge, and draweth back with heade and ſhoulders, as though he pulled at a rope, or elſe were afrayd of the marke. Another draweth his ſhaft well, untill within two fingers of the heade, and then he ſtayeth a little, to loke at his marke, and that done, pulliſh it up to the head, and lowſeth: which waye, although ſome excellent ſhooters do uſe, yet ſhurelye it is a fault, and good mennes faults are not to be folowed. Some draw to farre, ſome to ſhort, ſome to ſlowlye, ſome to quicklye, ſome hold over long, ſome let go over ſone. Some ſette theyr ſhaft on the grounde, and

O fetcheth

fetcheth him upwarde; another pointeth up towards the ſkye, and ſo bringeth him downwards. Ones I ſaw a man which uſed a bracer on his cheke, or elſe he had ſcratched all the ſkinne of the one ſide of his face with his drawing-hande. Another I ſaw, which, at every ſhote, after the looſe, liſted up his right legge ſo far, that he was ever in jeopardye of faulinge. Some ſtampe forwarde, and ſome leape backward. All theſe faultes be eyther in the drawing, or at the looſe; with many mo, which you may eaſely perceyve, and ſo go about to avoide them. Now, afterward, when the ſhaft is gone, men have many faultes, which evill cuſtome hath brought them to; and eſpeciallye in cryinge after the ſhaft, and ſpeaking wordes ſcarce honeſt for ſuch an honeſt paſtime."

The

It is unneceſſary for me to repeat, that theſe faults ſhould be avoided in learning to ſhoot, as they not only are extremely ungraceful, but likewiſe increaſe the difficulty of drawing the Bow

CHAP. V.

Of the BOW-STRING.

THE String is one of the moſt material parts of the Archer's apparatus, as the ſafety of the Bow, in a great meaſure, depends on the firmneſs of it. The univerſal concuſſion and jar, which the fracture of the Bow-ſtring cauſes in the Bow, never fails, either at the moment, to ſhatter it in pieces, or to raiſe ſplinters, which, getting more and more deep into the wood, as the Bow is uſed, at length entirely ſpoil and ruin the inſtrument. The Bows which (as it is termed)

termed) "ſollow the String;" that is, which bend a little inwards, are leſs liable to injury from the breaking of a String, than thoſe which are in a ſtraight poſition, or which bend backwards; and it is for this reaſon ſome Archers prefer the Bows of this former deſcription.

The Bow-ſtrings mentioned by ancient writers, ſeem to have been made from leather, or thongs cut from freſh hides taken from Bulls, and other kinds of animals. The phraſe, νευρα βοειαι is very common in Homer.

Strings were alſo compoſed from the ſinews of beaſts; and on that account are termed, "*Nervus*,"—"νευρη." It was cuſtomary, for this purpoſe, to ſelect the ſinews of ſeveral of thoſe kinds of animals, remarkable for their ſtrength or activity; ſuch as Bulls, Lions, Stags, &c.

&c. and from those particular parts of each animal in which their respective strength was conceived to lie. From Bulls, the sinews about the back and shoulders were collected; and from Stags, they took those of the legs. Large, as well as small ropes were formed of these materials, which proved of very great use, when applied to the military weapons, and the greater sized engines.

Catgut, prepared from the intestines of animals, has been made serviceable for the purpose we are now speaking of, and continues to be used at present in the eastern countries. Many of the Bow-strings of this sort, are composed of a number of small cords, going the whole length, being bound in two or three places with silk, in order to keep them together. Experience has taught the Archers, that a number of small cords

thus

thus accumulated in one, proves much ſtronger than a ſingle one of the ſame external dimenſions. Theſe kinds are, however, ſometimes uſed at preſent; but it is probable they were more in requeſt formerly. As this ſort is ſimilar in com-poſition to the ſtrings on the lyre, or harp, it is more ſonorous than any other ſpecies. The Scythians, uſing this kind, perhaps, are ſaid to have amuſed them-ſelves at feaſts, by ſounding their Bow-ſtrings, and felt an extraordinary pleaſure in thus having their military thoughts awakened.

The natives of America, as well as Aſia, have had the method of making Bow-ſtrings from the ſinews of animals, and from the inteſtines. The Eſkimaux Strings appear principally of the former kind.

Hair from the tails of Horſes was formerly manufactured into Bow-ſtrings, and appears to have been not an uncommon material for the purpoſe. The word, ἱππειος, which ſignifies that ſpecies of ſtring, frequently occurs in Homer, and from thence we may infer the antiquity of the practiſe. This kind is taken notice of likewiſe by Ovid, in the following lines:—

> "At ſemel intentus *nervo* levis arcus *equino*
> "Vincula ſemper habens irreſoluta manet."
>
> *Epiſt.* 2. *L.* 21.

We learn, that on preſſing emergencies, even the hair from the heads of women has been formed into Bow-ſtrings; and a temple in Rome was dedicated to Venus the Bald, on an occaſion of this kind. "Prætereundum ne quidem illud eſt, quód tanta fide Aquileienſes contra Maximium pro Senatu fue-

rant, ut funes de capillis mulierum facerent, quum deessent nervi ad sagittas emittendas quod aliquando Romæ dicitur factum. Unde in honorem Matronarum templum Veneri calvæ, Senatus dicavit."

Jul. Capitolinus, in Maximino.

From an expression in Pliny, we may imagine the Orientals made use of the hair of the Camel formerly in making Strings, "Camelino arcus intendere Orientis populi fidissimum."—*See Pliny*, *B.* 11—49—*Vol. I. pg.* 642.

The most general material of which Strings are now made in England, is hemp; of which the Italian answers the best; and this substance possesses many advantages over all other sorts. Catgut is too much under the influence of heat and moisture, to prove at all times of a proper

proper tenſion; but hemp and flax have not this inconvenient and diſadvantageous quality belonging to them.

An old phraſe ſays, "It is good to have two Strings to your Bow;" and it appears to have originated from an ancient cuſtom. A paſſage in Aſcham teaches us it was practiſed in his day; and there is reaſon to think it had a much earlier exiſtence. "In warre," ſays he, "if a Stringe breake, the man is loſt, and is no man; for his weapon is gone;—and although he have *two Strings put on at once*, yet he ſhall have ſmall leaſure and leſſe roome to bend his Bowe; therefore, God ſend us good ſtringers, both for warre and peace!"

A law of Charlemagne, made in the year 813, ſeems to expreſs the ſame cuſtom:—"Et ipſe comes prævideat quo-

modo ſint parati (milites)——aut arcum cum duabus cordis."* I confeſs that there is another ſenſe in this paſſage, different from that I put upon it; but as the cuſtom evidently exiſted in ages poſterior to the æræa of Charlemagne, it might have originated as early as that reign.

I have an additional teſtimony, which appears to give weight to my conjecture on this head; and which ſhews this cuſtom prevailed in the beginning of the ~~thirteenth~~ century. I allude to the figure delineated in Plate 2, Figure ~~fig. [illegible]~~ 13

This was taken from a ſeal ſent on a letter from Sir James Pringle, to Mr. Waring, of Leiceſter Houſe, who favoured me with a copy. The letter accompanying the impreſſion contained the

* See Capit. Reg. Franc. a S. Baluzius, pg. 509.

the following defcription ;—" I feal this letter with a ring, a very curious antique, —a prefent to me, as Prefident of the Council of the Royal Company of Archers, from Mr. Gray, our Secretary. Which ring was found about a month ago, near or upon the field of the famous battle of Bannockburn, feveral hundred years ago."† This letter was dated, Edinburgh, Feb. 21, 1791.

The Bow reprefented in the hands of this Archer, feems to have two ftrings attached to it; one of which only is drawn up with the Arrow, while the other remains unemployed; and I prefume this muft have been the method of ufing the Bows, thus doubly ftrung.

In the Eaft Indies, the natives ufe a particular fort of String, by means of which

† This battle was fought in the reign of Edward II.

which they ſhoot balls of clay, which are rendered hard. The conſtruction of it is very ſimilar to that generally applied to the modern Croſs-bow, when uſed to diſcharge leaden bullets. It is made double, and near the ends the two pieces are bound together; but as it is neceſſary, in order to make a place for the ball, that theſe Strings ſhould be ſeparated in the middle, there is a ſmall piece of cane, or wood, placed between them, at each end, to keep them at a little diſtance apart. The ball is placed in a cloth ſocket, faſtened rather above the centre of the String; and when the Bow is uſed, the ſhooter takes hold of the cloth ſocket, and preſſes the ball within, by means of his finger and thumb, at the ſame time drawing up the String in the uſual manner. On looſing, the ball is carried by the ſocket, and projected from it in the way the Croſs-bow acts. The

String

String is fixed on the Bow ſo as to drive the ball clear of the wood part, and of the hand, for if it threw it directly forwards, it would endanger both. It is ſaid, the Indians are very expert in managing this contrivance, and are able to hit birds, and other moving objects.

Aſcham mentions, that they formerly made uſe of two Strings in England, the large, thick String; and a ſort much ſmaller. "The one," ſays he, "is ſafe for the Bow, but does not ſhoot ſtrong; while the other is infinitely preferable in long diſtances, but at the ſame time does not direct the Arrow ſo true, and is ſooner broken.

I am not acquainted with the ſeveral ways which were practiſed by the ancients in ſtringing their Bows; it was uſual, however, I think, to hold the Bow in the

the left hand by the middle, and to preſs on the upper end with the right, at the ſame time ſlipping the String into its place, while the lower end of the weapon reſted againſt the knee of the left leg.

There is a figure very diſtinctly drawn on a medal in Dr. Hunter's Muſeum, which repreſents an Archer ſtringing his Bow, exactly in the poſition I now ſpeak of, and which is copied, Plate 2, Figure 11. It is a Cretan coin.

Ovid, ſpeaking of Cupid going to ſhoot and preparing his Bow, ſays,

"Lunavit que *genu* ſinuoſum fortiter arcum."

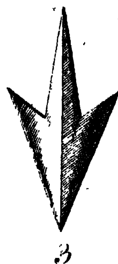
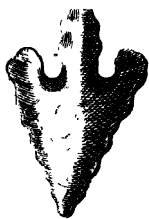
El. 1. *Lib.* 1. *Lin.* 23.

There is a figure in this poſture drawn in Plate 24, Vol. III. of the Muſeo Capitolino. And another, Pl. 21, Vol. II. of

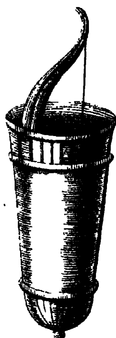
of the—"Antiche Statue Greche e Romane che nell' antisala della Libreria di San Marco, e in altri luoghi publici di Venezia si trovano."

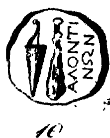
Fol. Two Vols. Venez. 1743.




3


5


7


9

ΑΛΟΝΤΙ
ΝΩΝ
10


ΣΙΝΩ
ΠΗΣ
12

13

CHAP. VI.



Of ARROWS.

THE figure of the Arrow has undergone less variation than that of the Bow. As curved lines admit of more variety than straight ones. The Scythian, Indian, and Dacian Bows, have each their characteristic forms, but the head, or the feathers of an Arrow, are the only parts which can be varied materially.

The substances from which Arrows have been fabricated, have differed in almost every country. They were frequently made of reeds, as we may infer

 from

from the Latin word *Arundo*, signifying both an Arrow and a reed.*

Pliny informs us, that this substance was in the highest request for the purpose we mention, and the Calamus, another species of reed, says he, hath overcome half the nations of the world, in battle.§

The

* It is observed by one of the great Metaphysicians of the present day, that the language of mankind may furnish good evidence of opinions, (and manners he might have added) which have been early and universally entertained; and that forms contrived for expressing such, may remain in use after the opinions (and customs) which gave rise to them, have been greatly changed.—*Essay on Active Powers. pg.* 18.

Mr. Gibbon also, in Note 36, Chap. 1. says,—"There is room for a very interesting work, which should lay open the connexion between the languages and manners of nations."

§ Calamis Orientis populi bella conficiunt: calamis spicula addunt irrevocabili hamo noxia. Mortem accelerant pinna addita calamis, Fitque et ex ipso telum aliud fracto in vulneribus. His armis Solem ipsum obumbrant. Propter hoc maxime serenos dies optant:

The tree called *Cornus*, was formerly much celebrated for Arrow-making, and also for the purpose of Bows,† as was the Palm-tree. But the Calamus, and particularly a sort growing anciently in a river called the Rhine,|| was valued for its weight, and the steadiness with which it resisted the currents of wind in flying. —The ancient Scythians used Fir-tree, or Deal, as Strabo relates.‡

The

optant: odere ventos & imbres, qui inter illos pacem esse cogunt. Ac si quis Æthiopas, Ægyptum, Arabas, Indos, Scythas, Bactros, Sarmatarum tot gentes & Orientis, omniaque Parthorum regna diligentius computet, æqua ferme pars hominum in toto mundo calamis superata degit."

Plin. Lib. 16, *Sec.* 65.

† —— "Apta fretis abies, bellis accommoda cornus."

Cladian.

|| This river was not the great Rhine of Germany, but a smaller one of that name, rising in the Appenines, and flowing near Bononia, and is therefore called by Pliny, in the above passage, "Rheno Bononiensi amne."

‡ — *καὶ οἰςοις ἐλατίνοις χρῆσθαι τους ταυτη Σκυθας.*

Strabo, pg. 510.

The modern Arrows from India, are made of cane, which being of a ſpecies very ſtiff, and at the ſame time of little weight, they fly with uncommon velocity from the Bow, and are capable of withſtanding a ſevere blow from objects which oppoſe their motion.

The inhabitants of Guiana uſe cane for the making of Arrows, and affix an head of firm and ſharp wood to them. We are told by Bancroft, that theſe people uſe Bows about five feet in length, and Arrows of about four feet, which are partly of a cane without knots. This cane part is uſually about a yard long, and in the end of it is fixed a piece of hard wood, about twelve inches. This wood ſometimes has a large gobular head; but if the Arrow be intended to kill, the wood part is either formed into a ſharp point, bearded with notches, or

is armed with a piece of iron; which metal they use since the Europeans have visited the country.*

I have in my possession some of the kind here spoken of; and although they are of such prodigious length, (some being more than five feet) they are nevertheless extremely light. I had the curiosity to weigh one of the canes, without the head part, it measured four feet long, and was half an inch in diameter throughout, when it appeared to be only three quarters of an ounce in weight.

Ascham has enumerated fifteen sorts of wood, of which Arrows were made in England at the time he lived, viz.

" Brazell,

* The Arrows used by the inhabitants of Tunna island, are made of reeds, pointed with hard wood; some of them are bearded; and those for killing birds have two, three, or sometimes four points.

Cook's Voyage, 1772—1775, *Vol. II. pg.* 82.

"Brazell, Turkie-woode, Fusticke, Sugercheste, Hardbeame, Byrche, Ashe, Oake, Servistree, Aulder, Blackthorne, Beche, Elder, Aspe, Salow." Of these, Aspe and Ash were prefered to the rest; the one for target shooting, the other for war.

A simple stick, without any alteration than pointing, was perhaps the first kind of Arrow used by mankind.† The hard wood found in some climates was well calculated for the purpose, as it was capable of retaining its point, tho' forced with violence against the firmest bodies. But the use of stones appears to be one of the first inventions with respect to pointing, and there are many curious circumstances relating to this practice. The class

† The Lycian Arrows, according to the description of Herodotus, appear to have been nearly of this kind, as they were not guided by feathers. See Herodotus, Lib. 7, pg. 470:— "οϊστους καλαμινους απτερους."

class of these substances principally made use of in all nations, was the Sileceous—as common Flint, Jasper, Agate, &c.

There are the best reasons for imagining that these Arrow-heads were in use from the highest antiquity, as there is scarcely any country in which they have not been found buried in the earth. They are not uncommon in Scotland, England, and Ireland. America produces them in all its parts; and what is extraordinary, I have heard from natives, that James River, in Virginia, often throws them on its banks, during the overflowing of the waters. If this fact be true, (but I cannot vouch for it myself) it is not a bad proof, of the antiquity of the use of stone points, and the long time America has been peopled; for we must admit many ages for accident to have accumulated so great a num-

 ber

ber in the ſpace James River occupies, even allowing the natives to kill beaſts and birds, or fiſh from the banks, which is not their practiſe.

Herodotus tells us, the Æthiopians pointed their Arrows with a ſtone uſed to engrave ſeals with.*

Theſe ſtone-heads have been formerly called Ceraunia, and are reported by Pliny to have fallen from Heaven in ſtorms of thunder. Others have claſſed them as cryſtallizations, and arranged them among the natural productions of the earth. But they were in fact, the heads applied to Arrows, in the early ages of the world, and bear the moſt evident marks of manufacture and art. They ſeem to have been formed by hammering and rubbing.

Thoſe

* See Herodotus, pg. 464.

Those which are found in Ireland and Scotland are generally of a mixed brown-coloured flint. Though there are some in Perthshire red, which appear to have been the heads of very small Arrows. In Ireland, some of them are made of a flint, almost as pelucid as an onyx, and nearly of the same colour. Very small Arrow-heads are found in Barbadoes, made of a fissile talky stone.† Instruments and weapons, such as axes, chisels, arrow-heads, the points of darts, and lances, have been found of the same materials. Dampier formerly, and Cooke lately, discovered people who were in the practise of using these stone tools and weapons; and the Spaniards, at their first descent upon America, found no other in use among the natives of the continent, and the islands adjacent; for although the Americans had iron ore in

*Chambers's Dictionary.

abundance, they were ignorant of its use till taught by the Spaniards.

It is remarkable that these weapons are made with greater regularity than we might reasonably expect, considering the imperfections of the instruments which must have figured them. They are many of them formed in a manner very difficult to make without breaking, for the part is often long, and very thin. They are exceedingly sharp, and the edges frequently indented like the teeth of a saw. The Arrow-heads likewise, though found in countries the most remote from each other, are still nearly alike in figure. Those found in the parts bordering on the straits of Magellan are said, by Dr. Woodward, to resemble those of this island. He adds his reasons,—" That different men having in view the same design, conducting their thoughts in a

regular

regular manner, may come, in the pursuit, to the ſame concluſion; and, as in this caſe, hit on the ſame ſhape for a weapon of ſuch deſign. But it is much more likely, that they came all from the ſame origin, and that the firſt module was brought from Babel, to the various countries whither the ſeveral colonies, ſent thence, made their migrations."* (In Plate 2, N° 4, 5, and 6, are three of theſe heads.)

The horns of animals have been employed for the pointing of weapons in ancient times; and as wild beaſts wore no armour, and ſavage nations little covering, arms of this kind would be found efficacious, in the hand of the hunter, or warrior. Indeed, it is not an

* See Woodward's Letters on Foſſils. Let. 2d. to Sir John Hoſkyns, pg. 43.

an uncommon practise at this day, among those nations ignorant in metals.†

We cannot imagine the instruments of war, before the discovery of fire, could have been pointed with metal; but the moment the art of separating that substance from the ore was known, metalic weapons would no doubt be fabricated, and introduced in battle. Arrows which usually had been pointed with horn, bone, or flint, would be covered with more permanent materials. Copper, and what was called brass, seem to have been first discovered by mankind, and accordingly those metals appear to have been first in use. Arrows and javelins were commonly

† Lord Bacon has observed what seems very extraordinary, "That an Arrow *without* an iron point will penetrate to the depth even of eight inches into a piece of wood, when shot from a Turkish Bow; while another Arrow, *having an iron point*, will not penetrate near so deep."

Expt. Solitary 704. Nat. Hist.

monly headed with braſs, or copper, in the time of Homer, as appears from many paſſages in the Iliad.§ Herodotus mentions a wonderful braſs cup, made from the heads of Arrows. He ſays, a King, named Ariantas, deſiring to number the people of Scythia, commanded that each perſon in his dominions ſhould bring the head of an Arrow to him, under pain of death, in caſe any one neglected. From the heads which were collected, a cup was made, capable of holding ſix hundred hogſheads; and the thickneſs of the ſides of it was equal to ſix digits.‡

The ſoldiers of Greece and Rome had not only their ſpears, javelins and arrows pointed with braſs, but alſo their whole armour conſiſted of that metal. Livy ſays,

§ Iliad, B. 4, L. 527—B. 13. L. 607.

‡ Herodotus, pg. 285.

ſays, the ſhield, the buſgin, the helmet, were all of braſs, among the Roman Legions.||

The ancients are reported to have been in poſſeſſion of a method of indurating braſs, but the proceſs is not at this day known. The points of ſpears, and the other weapons, which are not unfrequently found in ſeveral parts of Europe, are proved to contain an alloy very different from that made uſe of in the preſent day. Some experiments made by Mr. Dize, and inſerted in the "*Journal de Phyſique*," for April, 1790, have ſhewn that the braſs of the Greeks and Romans was compoſed of copper, with a mixture of tin, inſtead of zinc; and he ſuppoſes that it was owing to this circumſtance that they were rendered ſo hard. But I am

|| Clypium ocreæ, lorica, omnia ex ære, hæ ut tegumina corporis eſſent. Lib. 1.

am inclined to think that there was a ſubſequent proceſs, to compleat the tempering. Mixtures of copper with tin, are manufactured in the preſent times, and are particularly applied to the caſting of artillery, and bells; for which laſt purpoſe the copper is to the tin, in the proportion of ten parts to one. Copper, by theſe alloys, is rendered hard, but brittle, as is the caſe with an addition of zinc. We may conjecture, therefore, that if the ancient braſs was in fact ſo hard as it is repreſented to have been, that a temper was given by ſome proceſs uſed after the metal was compoſed, and that it was not owing to the mixture alone. Virgil tells us, the ſhield made by Vulcan for Æneas, at the requeſt of Venus, and which the goddeſs preſented to that hero herſelf, was made of braſs, and was hardened by plunging into water; but perhaps this idea might ariſe only from

the making of ſteel from iron, and not from a common method uſed to prepare braſs.

> "Ingentem clypeum informant, unum omnia contra
> "Tela Latinorum; ſeptenoſque orbibus orbes
> "Impediunt. Alii ventoſis follibus auras
> "Accipiunt redduntque: alii ſtridentia tingunt
> "Æra lacu."
>
> *Ænead.* 8, 447.

I need not ſay, that latterly, iron has been in general uſe for the heading of Arrows; but it may prove a more extraordinary piece of information if I ſay, that they have been pointed with gold and ſilver, and thus uſed in battle, even in Europe.*

The figure of the Arrow-head has been very ſimilar in all countries,—at leaſt thoſe made for the purpoſe of war. They

* See Nicetas. Annal. pg. 66. A. Fol. Paris.

They are repreſented ſometimes barbed, ſometimes plain and long. They are often flat, and nearly reſembling the leaves of ſome vegetables. (Plate 2, Figures 1, 2, and 3, are taken from ancient Arrow-heads.) N° 1 and 2 were to be fixed to the wood-part by a ſmall ferrule; but N° 3 is a triangular ſolid pyramid, and the upper point was driven into the end of the wood, in the ſame manner in which files and chiſſels are faſtened to their handles.

Theſe barbed ſort are ſpoken of by Ovid, in the following verſe:—

"Et manus hamatis utraque eſt armata ſagittis."

The heads of theſe Arrows were ſeldom more than an inch, or an inch and an half long; but the unbarbed were longer.*

The

* There is a ſtrange error in Gronovius, with reſpect to Arrow-heads. He tells us, that ſometimes they

The Emperor Commodus is ſaid to have uſed ſhafts, the heads of which were faſhioned like an half moon:—but we have occaſion in another place to ſpeak of theſe.

In more recent times, we are informed, there were great variety of Arrow-heads uſed in war. But as figures will be better

they were three or four inches long; and quotes his authority from Statius. Theſe are the words:—"Aliquando duobus, tribus, imo quatuor uncis armabatur; ut legere apud Statium,

"Aſpera tergeminis acies ſe condidit uncis."

But this line in Statius has no reference to the ſize of Arrow-heads, very much otherwiſe, as the context ſhews:

"Prima Tanagræum turbavit arundo Choræbum
"Extremo galeœ, primoque in margine parmæ
"Anguſta tranſmiſſa via. Stat faucibus unda
"Sanguinis, & ſacri facies rubet igne veneni.
"Sævius Eurytion, *cui luminis orbe ſiniſtri*
"*Aſpera tergeminis acies ſe condidit uncis.*
"Ille trahens oculo," &c.

Statius Thebaid. Lib. 9, L. 745.

ter underſtood than any verbal deſcription, I ſhall refer the reader to the third Plate, which contains a variety of Arrows chiefly in uſe from the tenth to the fourteenth century. It will be obſerved, that ſome of theſe Arrows had the head fitted into the wood, and others had the wood fitted into the head. Some of them had their heads but ſlightly fixed on, or rather, had ſeparate pieces of iron which applied to the Arrow, in order that, when a wound was given, the ſhaft alone ſhould be drawn back, leaving the head buried in the fleſh; and to render this more effectual, the iron was curved, or barbed, in various methods. (Plate 3, Figure A and B repreſent Arrows; and *a* and *b* the heads to be applied.)

The Turkiſh Arrows in the fifteenth century are reported, by Villamont, to have

have been headed half a foot in length, and barbed.†

The Arrows uſed in the eaſt at preſent, are armed with a flat barbed iron point, about an inch in length, which is fixed on to the cane by a ſhort ferrule. Sometimes the heads are made in an acute pyramid, about one inch and an half long.

The common ſhooting Arrows in England, as they are not deſigned to inflict death, are not very ſharply pointed. The ſides of the ſhaft converge to an obtuſe point, at the diſtance of an inch.

The

† Villamont, Voyages du. Liv. 2, pg. 223.

The WHISTLING ARROW.

THERE is a kind of Arrow which, from the conſtruction of its head, is called the *Whiſtling Arrow*. There are two methods in which the heads are made. The one is by having a ball of horn perforated with holes at the end, and faſtened to the Arrow, by the wood paſſing through it, and fitting tight. But this is not the moſt deſirable kind; for as the perforations are liable to become choaked up, by the Arrow falling to the ground, the head muſt be taken off whenever the holes are thus filled; and as the horn ball does not adhere very firmly, if the Arrow penerate the earth to any depth, it is difficult

ficult to draw it back without loosing the head. Another sort, which are usually larger, and which have a deeper tone, are made with a screw in the middle of the ball; by which means all the inconveniences attending the smaller kind are removed, as the ball is in the latter case glued firmly to the body of the Arrow, and may be drawn from the ground without danger of separating.

It is supposed these Arrows were formerly applied to some military uses, and particularly giving signals in the night. The Chinese, I have been told, have used them for this purpose in time immemorial.

How long these Arrows have been known in England is uncertain; but I have found no passage refering to them earlier than the time of Henry VIII.

In

In Hollinſhead we read, "That in the year 1515, the court lying at Greenwich, the King and Queen, accompanied with many lords and ladies, rode to the high-ground of Shooter's-hill to take the open air; and as they paſſed by the way they eſpied a company of tall yemen, cloathed in green hoods, and Bows and Arrows, to the number of two hundred. Then one of them, which called himſelf *Robin Hood*, came to the King, deſiring him to ſee his men ſhoot, and the King was content. Then he whiſtled, and all the two hundred ſhot, and looſed at once; and then he whiſtled again, and they likewiſe ſhot again. Their Arrows whiſtled by craft of their head, ſo that the noiſe was ſtrange and great, and much pleaſed the King and Queen, and all the company. All theſe Archers were of the King's guard, and had thus apparelled themſelves to make ſolace to the King."*

T From

* See Hollinſhead's Chron. Vol. III. pg. 836.

From the manner in which this ſtory is told, we may be led to think the Whiſtling Arrow to have been a new thing in the beginning of the ſixteenth century, and perhaps juſt introduced, otherwiſe the exhibition would have ſcarcely been worth performing before the King and his company.

There are contrivances by which ſmall-ſhot and balls are diſcharged from the Bow, and by the aſſiſtance of a ſpecies of Arrow, (if we may venture to term it ſo) which is fixed on the Bow-ſtring, by means of a perforation through one end, into which the String is paſſed. At the head of this rod is a tin ferrule, about there or four inches in length, and into which the ſhot are placed. It is uſual to have a ſtring on purpoſe for this kind

kind of ſhooting, well wrapped in the middle with ſilk; and the Arrows ſlipped on, that the whole may be removed from the Bow at pleaſure. When an apparatus thus fitted up, is diſcharged, the Arrow communicating the force impreſſed upon it by the String, to the ſhot, projects them with a velocity in proportion to the ſtrength of the Bow made uſe of; but as the weight of the charge and the Arrow tend in a great degree to diminiſh the velocity of the body emitted, we muſt conceive the effect much leſs powerful, than that of an Arrow ſhot from the ſame Bow.

In diſcharging balls, the ſame apparatus is made uſe of, except that inſtead of a tin ferrule, as in the former caſe, the Arrow has a weak ſpring on each ſide of the head, placed ſo as to preſs gently on the balls.

One invention on this principle is very extraordinary, and which I cannot omit to mention, though it appears more curious than uſeful.

The Bow is to be fitted up as in the preceding caſes, and the Arrow as that uſed for diſcharging ſhot, only that this muſt have four tin ferrules about an inch long each, inſtead of a ſingle one. Theſe are to be placed nearly parrellel, but not entirely ſo, as they are intended to make the charge diverge. A light ſilk net about four feet ſquare, is to be prepared, having a ſmall leaden bullet fixed on each corner: theſe bullets are to be put ſingly into each of the four tin ferrules, and in this ſtate the whole may be carried into the field for uſe. On diſcharging the Bow, the balls are thrown out with violence, carrying the net with them, and

and at the ſame time expanding it; and ſhould it be directed properly towards a partridge, or any other bird on the wing, the net will not fail to entangle and bring it to the ground.

CHAP.

CHAP. VII.

Of POISONED ARROWS.

AMONG the various appendages which have been attached to the Arrow, the moſt formidable ſeems to be that of *poiſon*. We are told that a fluid is prepared, and loaded with ſuch powerful infection, that the animal ſyſtem ſhrinks under its effects, almoſt inſtantaneouſly, if it be once introduced deeper than the ſkin.

The vegetable and mineral poiſons we are acquainted with in Europe, if adminiſtered in ſmall portions, require time to operate, and ſeldom produce immediate death.

death. But we ſhall find that in other parts of the world, nature has infuſed into the cells of ſome vegetables, ſo deadly a venom, that not even the wound of the moſt virulent ſerpent can equal.

Mankind probably fell victims to this poiſonous juice at its firſt diſcovery; but the firſt uſe to which it was applied ſeems to have been the envenoming of Arrows, which were directed againſt wild beaſts. For this purpoſe it was a very valuable acquiſition, as the wound of an Arrow alone would ſeldom prove inſtantly mortal.

The uſe of poiſoned arms is of high antiquity; they were common in the time of Alexander, as Juſtin records.*

Virgil,

* Cum veniſſet ad urbem Ambigeri regis, oppidam victum ferro audientes, ſagittas veneno armant, atque ita gemino mortis vulnere hoſtem a muris ſummoventes, plurimos interficiunt.

Juſtin, Lib. 12, *Chap.* 0.

Virgil, in the 9th Æneaḍ, celebrates Amycus for this art:

"* * * * * * * * * Inde ferarum
"Vaſtatorem Amycum, quo non felicior alter
"Ungere tela manu, ferrumque armare veneno.
Æneid. 9. 771.

The Gauls, we find by Pliny, ſhot poi-ſoned Arrows in hunting Stags, and which were made from a tree called Limæum.§

The poiſon with which part of the inhabitants of America arm their darts, is ſaid by ſome to be prepared from a tree called Mancanilla—they add, that it is death to thoſe who take in the effluvia of it by inſpiration, and for that reaſon the old people and criminals are ſent to

U gather

§ Limæum herba appellatur à Gallis, qua ſagittas in venatue tingunt medicamento, quod venenum cervarium vocant.
Plin. B. 27, *Chap.* 11, *pg.* 433. *Vol. II.*

gather the juice, protecting their nose and mouth as well as they can; but this is looked upon as a fable.†

By others it is said, the poison applied to arms is gotten from a serpent, which, when irritated, vomits a noxious liquor; and if the point of an Arrow be stained with it, the wound inflicted by that weapon will prove instantly mortal.‡

But from whatever things these venomous ingredients are procured, it is certain the effects are often violent and dreadful. The savages in America pretend, that by compounding the liquor, into which they dip their Arrows, with a greater or less

† A similar story is told of a tree, in the island of Java, called the Upas, and of another in Makassar, which Gumilla mentions.

See Vol. III. pg. 16. Hist. de l'Oronoque.

‡ See Viaggi da Ramusio, Vol. III. pg. 155—E.—Fol.

leſs portion of the poiſoning quality, they can cauſe immediate death from a wound, or protract the effect to a few days, a week, or a fortnight.

The real advantage derived from the uſe of poiſoned Arrows in war, ſeems ſo trivial, that we may doubt whether victory was ever apparently aided by the effects of thoſe weapons. And although Alexander and Cortes, as well as many warriors, have been expoſed to theſe doubly-armed inſtruments of death, we do not find they have ever atteſted the double efficacy of them.*

The natives of the eaſt, and in America, who practiſe the poiſoning of Arrows, employ thoſe inſtruments in the hunting

 of

* It muſt be obſerved, that the uſe of poiſoned Arrows is principally confined to the chaſe, and is introduced upon emergencies only in battle, among the Americans.—See Condamine, Voyage, pg. 206, and

of wild beasts. But the Arrow they use is of a very different construction from those which are usually shot from the Bow. They are simple sticks of hard wood, poisoned at the end, and are so light as to be blown through a tube, in the manner we often see boys blowing peas, or other substances, in this country.

I find the following circumstantial account of this affair in the History of Guiana, by Bancroft. The author says, "The poisoned Arrows are made of splinters of the hard and solid outer substance of the Cokarito tree, and are usually

and Bancroft's History of Guiana, pg. 306.—There is, however, an instance of the Americans having used these Arrows with great success, related in the "Viaggi da Ramusio," Vol. III. pg. 24.—A. Vasco Numez, with 300 men, attacked a party of Indians, who immediately turned about, discharged a flight of poisoned Arrows on them, and at the first shot killed 107 of the 300 who had invaded their country.

ally about twelve inches in length, not larger in bulk than a large common knitting-needle. One end of the Arrow is formed into a ſharp point, and envenomed in the poiſon of Woorara; round the other end is wound a roll of cotton, adapted to the cavity of the reed through which the Arrow is to be blown. The Arrow, thus decked and armed for deſtruction, is inſerted in the hollow ſtraight reed, ſeveral feet in length, which being directed towards the object, the Arrow is by a ſingle blaſt of air from the lungs, protruded through the cavity of the reed, and flies with great ſwiftneſs and unerring certainty, the diſtance of thirty or forty yards, conveying ſpeedy and inevitable death to the animal from whom it draws blood. Blowing the Arrows is the principal exerciſe of the Indians from their childhood, and by long uſe and habitude, they acquire a degree of dex-

terity

terity and exactness, which is inimitable by an European, and almost incredible."

The same is practised in the East almost universally. The inhabitants of Makassar, particularly, are accustomed to poison their arms. The brother of Mr. Tavernier, (the celebrated French traveller) while in India, had a remarkable proof of the activity of this poison exhibited to him.

An Englishman residing in Makassar had in a rage, killed a subject of the king of that island, but his offence was pardoned. In consequence of which the other English, French, and Dutch inhabitants of the island, fearing lest the resentment of the natives might be exercised against them, requested the king that the person guilty of the charge, should suffer for what he had done, that

no

no future revenge might be meditated by his subjects, against the Europeans, as was sometimes the case. The king consented, and as he wished the criminal to suffer as little pain as possible, he said he himself would inflict the stroke by a poisoned Arrow. He desired the brother of Mr. Tavernier, (for he was very intimate with the king) to attend him to the execution. When the man was brought, the king asked him what part he should wound, upon which he named the great toe of the right foot. The king then took an Arrow, properly poisoned, and adapted it to the tube, and blew it with incredible exactness to the point. Two European surgeons on the spot, immediately exerted their skill, but though they amputated the part far below the wound, with quick dispatch, the man died in their hands.

All

All the kings of the eastern countries collect this poison to tinge their Arrows, and keep them ready for use during a long time. The king of Achen made a present of a dozen of these Arrows to a Mr. Coke, envoy at Bavaria, with whom Mr. Tavernier was well acquainted. One day when these gentlemen were together, they had the curiosity to try whether those weapons retained their virulence or not, as they had been kept several years unused. They shot some of them at squirrils and other animals, all of which dropt the moment they were wounded, a circumstance which sufficiently proved, not only the violence, but also the permanence of this terrible poison.*

I cannot authenticate the violent effects of poisons applied to Arrows better, than by producing the result of some experiments

* See Voyages de Tavernier, Vol. II.

ments which were made on the poiſons of Lamas and Ticunas, brought to France by Mr. de la Condamine, from South America.†

This gentleman gave a part to Mr. Heriſſant, who wiſhed to aſcertain whether the reports concerning the violent effects of theſe ſpecies of poiſon, were true or falſe. He accordingly began to prepare the poiſon in the way Mr. de la Condamine informed him the Americans did, but in his proceedings he met with two accidents, either of which might have coſt him his life.

He underſtood that the proper method was to diſſolve the poiſonous ſubſtance he received, in water, and to evaporate

X the

† Mr. De la Condamine informs us of a few experiments he tried on poiſoned Arrows, during his reſidence at Cayenne, which he has inſerted in the narrative of his voyage to the Amazon river. pg. 203.

the ſolution till it become thick, and dark-coloured.‡ He began the proceſs, but the fumes almoſt deprived him of his ſenſes, and had he not taken a large quantity of ſugar diſſolved in wine, which was preſcribed as an antidote, he might have fallen ſuffocated, and lifeleſs on the floor of his room.§

He, however, effected the proceſs compleatly at another time, and corked the liquid

‡ In the preparation of this poiſon, it is ſaid, the care of the boiling is entruſted to a criminal; and at the time the perſon becomes ſuffocated by the fumes, it is concluded to be ſufficiently boiled.—(*See Bancroft, pg. 290.—Alſo Gumilla, Vol. III. pg. 12.*)

But the Experiments of the Abbé Fontana on this kind of poiſon, prove the vapour to be innocent to the lungs. This author concludes the relation of his experiments in theſe words.—"Da tutte queſte ſperienze deduco che i vapori de' fumi del veleno Americano, ſono innocenti, o che ſi fiutino, o che ſi reſpirino."

Trattato del Veleno, Vol. III. pg. 28.

§ The fumes of a charcoal fire would have this effect, independent of any other cauſe.

liquid in a ſmall bottle, and locked it up. But wiſhing to begin his intended courſe of experiments, he one day took the phial containing the poiſon, into his hand, when in a moment the cork flew to the ceiling of the chamber, and the liquor ran ſtreaming over his hand. In this ſecond dilemma he conſigned himſelf to an inevitable and ſpeedy death. However, as there was no wound or puncture on his ſkin, by which the poiſon could penetrate to the blood, waſhing effectually removed the danger.||

Having eſcaped theſe misfortunes, he began his experiments on the 6th of June, 1748.

|| Bancroft ſays, in his Hiſtory of Guiana, that in trying experiments with poiſon, he had a drop accidentally thrown into his eye, but by waſhing he prevented any very bad effects, though he felt pain for ſome time afterwards. Pg. 293.

He made a little wound about three lines* in length, in the hinder leg of a Rabit, and put a bit of cotton moiſtened in the poiſon of Ticunas to the place; the creature died ſuddenly in his hand, without giving any ſign of pain, before he had time to put a bandage on, as he intended. This experiment was repeated the ſame day, on ſeven different animals, all of which died in leſs than a minute.—

June 7.—He dipped the point of a lancet into the poiſon, and pricked ſome Cats with the inſtrument, all of which died in leſs than three minutes.—

June 8.—He made an inciſion with a lancet, between the ears of a Cat, and with a pencil, put into it a drop of the poiſon of Ticunas, mixed with that of Lamas;

* A line is 1-twelfth of an inch.

Lamas; in an inſtant the creature died in his hands.—

June 9.—He tried experiments in the ſame manner on fiſh, reptiles and inſects, none of which were affected by the poiſon.

There are many more experiments of the ſame kind mentioned by Mr. Heriſſant, but theſe will clearly ſhew the accounts we have often read not to be fabulous. This gentleman obſerves alſo, that the animals which have been killed by the means here ſpoken of, are not in the leaſt unfit for uſe; they may be eaten without any ill conſequences. "In effect," ſays he, "I have eaten Rabits which I had killed with poiſon, and afterwards made ſeveral other perſons eat them.

them, and not one of us perceived the ſmalleſt indiſpoſition."*

I could ſcarcely read the account of theſe experiments without great pain, in ſeeing ſuch a number of harmleſs creatures ſacrificed to uſeleſs curioſity; uſeleſs, becauſe a few trials would have eſtabliſhed the fact as firmly as a great number; and as there ſeemed no material difference in the operation of the poiſon in his numerous experiments, it is ſurpriſing how a man could delight in taking away the life of ſo many animals. There is one thing, perhaps, that might be urged,—they felt no pain, he ſays; but if the deſcription of the circumſtances which attended thoſe who ſurvived the wound

* Gumilla relates, that the nations on the banks of the Oroonoko, eat the Monkies they kill by poiſoned Arrows.

See Vol. III. pg. 7. Hiſt. de l'Orenoque.

wound a little time, be true, it is evident they felt extreme pain.†

I perceive, in the course of the experiments he makes mention of, the following catalogue:—Six Horses, one Bear, one Eagle, one Hawk, two Wolves, one Pig, one Lamb, thirteen Rabits, fifteen Dogs, nine Cats; and of Rats, Mice, Pole-cats and Guinea-pigs, a great number. These were poisoned to ascertain the fact; but had the gentleman possessed less curiosity, and more compassion, he

† It is reported, that wounds made by Arrows, tinged with some kinds of poison, used by the inhabitants of Brasil, which are not instantly mortal, prove extremely tormenting; and the effects are so violent, that those who are wounded appear to be almost driven to distraction with the pain.—"Questi tirano le lor frezze con una herba cosi pestifera & velenosa, che non vi ha remedio alcuno: et quelli che ne vengono feriti, muoiono arrabiati, & fanno molti motivi & si mordono le loro proprie mani & carni, &c."

Ramusio, Vol. III. pg. 83.

he might have eſtabliſhed his facts with equal firmneſs.§

It would be happy if a remedy to the effects of poiſon were known, which could be acknowledged effectual; but although every country, and every age, has produced to the world a ſpecific in the caſe of poiſon, yet ſtill there is great uncertainty in many of the preſcribed cures, and in others manifeſt fallacy.

Pliny has enumerated ſeveral vegetable and mineral ſubſtances which were uſed, in order to counteract the effects of different poiſons made uſe of in his day. But as it is impoſſible to underſtand what he intends, in ſome of his deſcriptions, and as others are nothing leſs than fooliſh charms and *noſtrums*, we muſt eſteem his information as adding nothing to our knowledge

§ See Phil. Tranſ. Vol. 47.

knowledge on this part of the subject. The ancients, as far as I can discover, were in possession of nothing which can be called an effectual remedy. For though there are many instances recorded, of people having made use of antidotes, there are an infinity of examples, in which those antidotes have proved useless and ineffectual. Indeed, the accounts of those who are said to have been healed by the effects of a counter-poison, are expressed in such equivocal and inaccurate language, that we are still left in ignorance as to the thing in question. Generally, the fact alone is mentioned without any explanation; and some are content to place confidence in the assertion, without further inquiry. Justin, for instance, says, that Alexander, in besieging a town, had a great number of his soldiers wounded by the poisoned Arrows of the enemy. Among others, Ptolemy

was ſtruck by one of theſe darts. Alexander was exceedingly concerned for the misfortune which had befallen his friend, and ordered a decoction of herbs to be adminiſtered to him. The potion was accordingly given, and had an immediate effect in removing the impending danger. The ſame medicine ſpeedily relieved the greater part of thoſe who had been wounded, has it had done Ptolemy.*

But this fact will enable us to form no concluſion. The arrows by which the wounds were inflicted, might not have all been poiſoned; and if thoſe perſons who were hurt by the ſuppoſed poiſoned weapons, ſhewed any peculiar ſymptoms,

* Cùm inter multos vulneratus etiam Ptolemæus eſſet, moriturusque jamjam videretur, per quietem regi monſtrata in remedia veneni herba eſt, qua in potu accepta, ſtatim periculo liberatus eſt, majorque pars exercitus hoc remedio ſervata.

Juſt. Lib. 12. *Ch.* 10.

ſymptoms, different from others, wounded by untainted arrows, it might have been occaſioned by the imagination, and the *dread* of having ſuffered by poiſon. In fact, as we are ignorant of all concomitant circumſtances, and as correſponding examples are equally vague; our knowledge on this head muſt remain exceedingly uncertain.

But let us now endeavour to find out the opinions of more modern hiſtorians and phyſicians.

Men expoſed to particular dangers, are generally more ſkilled in protecting themſelves, than thoſe, who are unacquainted with ſimilar difficulties; and accordingly travellers report, that the natives of America, and the Eaſt, have all of them, either real or pretended, antidotes for the cure of the attacks of poiſon.

The most efficacious and valuable sorts are usually kept secret from the vulgar, and from foreigners, and are in the possession of the kings and chiefs. Some of these esteemed remedies are however mentioned, a few of which I shall take notice of.

The inhabitants bordering on the river of the Amazons, in which country Mr. Condamine travelled, use sugar or the sugar cane, and regard it a grand and universal specific; but this opinion does not correspond with that, formed from experiments, made in Europe.‡

Preparations of Tobacco are found fallible; though they have been eagerly recommended by many savage nations.§

Sea-

‡ See Condamine, Voyages, and Bancroft's Hist. of Guiana, pg. 297.

§ Les premiers Espagnols qui voulurent soumettre les Caraïbes, ayant souvent ressenti les effets de ces traits,

Sea-ſalt, or ſea-water has been eſteemed a remedy by ſome; and it is reported this was diſcovered to be a remedy by a boy who waſhed his wounded hand in the ſea, and by that means cured the part.

The facts related of the healing of wounds by the application of human ſaliva, appear better authenticated, and ſeem to ſhew its beneficial effects in particular inſtances.

Some of the experiments on the poiſon of Ticunas made by Fontana ſhew that the noxious quality was in a ſmall degree checked

traits, eurent recours á une infinitè de contre-poiſons, & s'imaginerent enfin d'en avoir trouvé un, dans les feuilles du tabac. Cette decouverte fut annoncée en Eſpagne avec tant d'eclat que Philippe II. fit faire des experiences en ſa prèſence ſur des chiens, dont on frotta les plaïes avec du tabac broyè, mais l'illuſion ne dura pas, & on s'apperçut bientòt que ce prètendu ſpécifique n'etoir pas infaillible.

Rech. ſur les Amer.

checked by the operation of the mineral acids, except by the nitrous, which had no good effects. Alkaline salt produced no change, and the only way by which the animal frame was protected, was by cutting the wounded part out instantaneously.||

The practise of shooting poisoned Arrows decreases rapidly; and as the use of fire-arms has penetrated to the depths of the Asiatic and African continents, Archery may, perhaps, in the space of a short period, be almost laid aside among those nations who maintain an intercourse by trade and commerce with Mahometan or Christian states.

I shall close this chapter with a short account of the wonderful effects ascribed

to

|| See Trattato del Veleno. Fontana. pg. 45—49, Vol. 3.

to the Dictamnus, an herb, growing principally in the island of Crete, and which many authors celebrate for the quality it possessed in relieving animals wounded by Arrows.

As early as the days of Aristotle, it is recorded, that the Cretan Goats, when they perceived themselves struck by an Arrow, went immediately in search of this vegetable, and behold! no sooner did they eat of it, but the Arrow, *(tho intus et in cute)* fell from the wound, and they recovered!

This story of the Dictamnus is told by Aristotle himself;* and Pliny could certainly

* —— αι εν Κρητη αιγες, οταν τοξευθῶσι, ζητῦσι το δικταμνον, το εκεῖ φυομενον, οταν γαρ φαγωσιν, ευθυς εκβαλλεσιν τα τοξευματα.

Arist. de mirab. auscult.

certainly not overlook a vegetable endowed with ſuch powers.†

Cicero has mentioned it;‡ as alſo have Virgil;§ and Ælian, in his hiſtory.‖

† Dictamnum herbam extrahendis ſagittis cervi monſtravere, percuſſi eo telo, paſtuque ejus herbæ ejecto.

Pliny, Lib. 8, *Ch.* 27.

‡ Capras autem in Creta feras, cùm eſſent confixæ venenatis ſagitis, herbam quærere quæ Dictamnus vocaretur; quam cum guſtaviſſent, ſagittas excidere dicunt è corpore.

Cicero, Nat. Deorum, Lib. 2.

§ Æneid 12. V. 412, et ſeq.

‖ Ælian var. hiſt. Lib. 1, Ch. 10.

CHAP.

CHAP. VIII.

I SHALL now ſpeak of ſome other uſes to which the Arrow has been applied, diſtinct from that of a warlike inſtrument; and firſt of

Divination by the Arrow.

The art of divination, which was once ſo common among the nations of the eaſt, ſeems to have exiſted, partly by the aid of credulity, and partly by artifice. Men inpower have by this means ſpoken their own will, under the maſk of that of Heaven, and have led the vulgar into ſchemes and actions, which, without this aſſiſtance, their own authority was un-

able

able to effect. Hope, fear, and curiosity, three strong moving principles of the human heart, were the passions on which this practise was founded, while imitation cherished, and craft led it forward.

Divination has obtained almost universally; and some of the most interesting events which have attracted the attention of mankind, have depended on the determination of the most insignificant circumstances. By the fall of an Arrow—by the shining of a stone—even by the polish of a man's thumb-nail,*—have nations been induced to raise war, and to involve thousands in misery and blood—Such obedience was there, to the will of rulers and of fate!

Arrows

* —uti aspicere solent in ungue pollicis manus splendente.

Gronov. Vol. VII.—27.

Arrows have been in uſe among all people for the purpoſe of declaring Oracles, and even continue ſo at this day among ſome of the eaſtern nations. We find in ſcripture, that it was practiſed by the kings of Paleſtine and the ſurrounding countries; and records of every kind eſtabliſh the antiquity of the cuſtom.

One ſpecies of divination, and which appears very common, was that of putting a number of Arrows with inſcriptions on them into a quiver, and after they had been mixed together by ſhaking, that which was firſt drawn, determined the fate of the affair in queſtion. For this kind of augury, the ancient Arabs ſometimes made uſe of ſeven Arrows, but in general, three were ſufficient. Theſe Arrows were not of the common make; they were without feathers, and were kept in the temple of ſome idol,

before whom the omens were usually drawn.

When three Arrows were used, there were inscriptions placed on two of them, the third was left blank. On the first was written,—" *Command me Lord*;"— on the second,—" *Forbid me Lord.*"— These two with the blank one were shaken together in a quiver, when any thing of importance was in question, and if the first mentioned Arrow was drawn, it was esteemed a favourable omen—if the second was drawn, it was an inauspicious one; but if the blank one, the three were again shaken, and the ceremony repeated, till the event was either favourably or unfavourably determined.†

A similar kind of divination was practised by the Chaldæans. They inscribed the

† See Univ. Hist. Vol. I. pg. 360.

the names of thoſe countries and cities, which they were about to make war againſt, on Arrows; and after having mixed them together, the name borne on the firſt drawn, was the country or city to be firſt attacked.‡

There was alſo a very myſterious cuſtom in general uſe, which conſiſted of drawing omens from the appearance of the bright points of Arrows, by the inſpection

‡ Erat mos regum Chaldæorum, ut in bellum exituri, ſagittas magico ritu Aſtrologorum opera conficerent, urbium et gentium nomina, quos evadere volebant inſcriberent, hinc commixta invicem cæco manuum aſſumpta, quamcunque ſagittam capellerent, illius gentem vel urbem, primo armis capeſſerent.

Gron. Ant. Gr. Vol. VII.—27.

And again—

Stabit, inquit Hieron, in ipſo compto, & ritu gentis ſuæ oraculum conſulet, ut mittat ſagittas ſuas in pharetram, & commiſceat eas inſcriptas, ſive ſignatas nominibus, ut videat cujus ſagitta exeat, et quam prius debeat expugnare civitatem.

Gron. Vol. VII. ibid.

ſpection of which, the magician or prieſt diſcovered the intentions of fate. We find in ſcripture, that this was in uſe among the Babylonians in the time of Nebuchadnezzer. In Ezekiel, ch. xxi. v. 21, we read, that "the King of Babylon ſtood at the parting of the way, at the head of the two ways, to uſe divination: he made his Arrows bright,—he conſulted with images."*

The Perſians made uſe of Arrows for another purpoſe. By their aſſiſtance they numbered their troops, and diſcovered who had fallen in battle. When they undertook a campaign, each man placed an Arrow, with his name inſcribed on it,

* Quale vero fuerit apud Babylonios divinationis genus, variant Interpretes, Quidam putant *terſiſſe* Babylonios, *ſagittas*, vel ferrum telorum, ut ſplenderent, in eoque ſplendore, tanquam in ſpeculo, cognoviſſe divinatores.

Gron. Vol. VII.

it, in a cheſt, or box, prepared to receive them; if after the battle, therefore, the king wiſhed to be informed who were killed, he gave orders that each man ſhould take the Arrow having his name upon it, from the cheſt, or box; and when all were drawn belonging to the ſurvivors, thoſe which remained ſhewed who were abſent, or dead.†

A ſtratagem of war, very much in uſe when the towers and walls of cities conſiſted chiefly of wood, was effected by means of the Arrow.

Beſiegers, unable to force a breach, or ſap a wall, had recourſe to fire, which they directed againſt all thoſe parts which were combuſtible.

The

† Apud Perſas invaluit mos, ut profecturi in bellum, in ciſtam ante regis tribunal, ſinguli ſingulas ſagittas immitt rent, mox reverſi, quiſque repeteret ſuam ut ex remanentibus illorum qui prælio cecidiſſent numerum internoſcerent.

Alex. ab Alex. Vol. I. pg. 149.

The besieged, on the other hand, aimed their attention against the machines and engines of wood, which fire could more speedily reduce than force.

In order to begin a conflagration, the fire was attached to the body of Arrows; and this was done by several different ways. Sometimes cotton, tow, or the like substance, previously mixed with pitch, rosin, oil, or naptha, was wrapped on the end of an Arrow, in the form of a ball; which ball, when in use, was fired, and the Arrow directed towards the wooden towers and engines of the enemy; where sticking firmly, communicated a flame to every part near it. This was used with great success in naval expeditions,§

Pliny

§ Oleo incendiario, stuppa, sulphure, bitumene obvolutæ, et ardentes sagittæ, per balistas in hosticarum navium alveos infiguntur, &c.

Veget. pg. 117.

Pliny mentions a ſort of bitumenous ſubſtance, procured from a marſh, which was uſed with great advantage in the defence of towns; for when fixed to Arrows, and enflamed, it ſtuck to the engines, and even to the bodies of the enemy, with great force; and it was almoſt as eaſy to deſtroy an army by fire as by ſword; for the flame raged with ſuch violence, that water was unable to effect its extinction—it rather ſerved to encreaſe the fury of it.‡ Indeed, ſeveral of theſe preparations appear to be almoſt unextinguiſhable; and the only method which ſeems to have proved efficacious, was that of covering the flame with earth.||

Some experienced artiſts had a cuſtom of expoſing oil to the action of the air, till

‡ Pliny, B. 2. Ch. 104.

|| See Am. Mar. & Plin. B. 2.

it became thick, like naptha, and in that ſtate they anointed their darts with it, ſeveral ſucceſſive times, as the different coats became dry and hard. When a ſufficient quantity had been put on, the Arrow was ready for uſe, and wanted only the contact of fire to render it doubly formidable.

Ammianus Marcellinus deſcribes another kind of fiery Arrow called the *Malleolus*. It was conſtructed, he ſays, of cane, or reed, and at the part where the head joined to the body, there was a piece of iron open-work communicating with the middle of the Arrow, which was made hollow, and the cavity filled with combuſtible materials. When theſe Arrows were uſed, the ſubſtance within was enflamed, and after being ſhot, ſticking to the object, burned with great rapidity whatever came in its way.*

It

* Am. Mar. Lib. 23. Ch. 4. pg. 277.

It was ufual in the management of thefe Arrows, to ufe a Bow much lower ftrung than in other cafes, left the velocity of the motion fhould extinguifh the burning matter.

The cuftom of fhooting fiery Arrows feems to have been in practife among many of the early nations of the Eaft: one inftance occurs, (not to mention more) wherein Xerxes made ufe of it againft the Athenians, as related by Herodotus.

The Falarica was another kind of Malleolus, ufually conftructed on a very large fcale, and fhot from the powerful engines. Livy defcribes this inftrument as a long fpear, to which tow and pitch were affixed at the head.†

† Falarica erat Saguntinis, miffile telum haftili oblongo, et cetera tereti, præterquam ad extremum, unde ferrum exftabat. Id, ficut in pilo, quadratum ftuppa circumligabant, linebantque pice. Ferrum autem tres in longum habebat pedes, ut cum armis transfigere corpus poffet, &c.——*Livy. Hift. L.* 21. –8.

The ſavages of America alſo practiſed the ſhooting of fire affixed to Arrows; and I by accident, in turning over the leaves of Purchaſe's Pilgrimage careleſſ-ly, met with the following piece of that author's wit, which is to the purpoſe. He ſays, "The Indians of Carendies, Zeecheuir, and Tiembus, aſſayled the town of *Good-aires*, and turned it into *good-fires*, by ſhooting Arrows fired at the end into it."

Fiery Arrows were uſed by the Engliſh formerly. They are taken notice of by Math. Paris;§ and were much eſteemed in naval engagements, as well as ſieges. We are informed, an Archer could ſhoot an ounce weight of combuſtible matter attached to the point of an Arrow, twelve-ſcore yards.

In

§ Miſſimus igitur ſuper eos ſpicula ignita.
M. Paris.

In ſea fights alſo, the ancient Engliſh ſhot glaſs phials filled with quicklime, in order to blind the eyes and diſorder the enemy.‡ The reader may ſee, in Pl. 4, Fig. 4, the form of the bottle of lime, copied from Strutt; and the other figures repreſent different ſorts of the Malleolus.

More modern warriors have found this ſtratagem to anſwer, even after cannon and artillery have been ineffectual. A remarkable inſtance of this kind happened when Charles XII. King of Sweden, with about ſixty of his ſoldiers, reſiſted the whole Turkiſh and Tartar army, near Bender.

Charles, driven from his intrenchments, was under the neceſſity of ſeeking refuge in a houſe near at hand; which, however,

‡ Et phialas plenas calce, arcubus per parva haſtilia ad modum ſagittarum ſuper hoſtes jaculantes,

Mat. Paris.

however, he ſaw occupied by the enemy. He entered with a few of his attendants, ſword in hand, and every Turk either leaped out at the window in hopes of ſaving himſelf, or was killed on the ſpot.

After getting poſſeſſion of this ambuſcade, by killing or driving about two hundred out of it, and which was very ſoon accompliſhed, the king withſtood the enemy bravely, and laid a great number lifeleſs by his muſquetry, from the windows. The houſe was ſtormed by cannon; but happily the walls were ſo ſubſtantial and firm, that the ſtone bullets flew to pieces by ſtriking againſt them; and the repulſe would have been compleat, had not the Turks ſhot Arrows with fire on them, into the roof, the windows and the door of their fortreſs. An attack which ſubdued even the Iron King of Sweden!*

By

* See Voltaire's Hiſt. Charles XII.

By the aſſiſtance of the Arrow alſo, we find from Herodotus, that a treacherous correſpondence was carried on at the ſiege of Potidœa, between Artabazus, the Perſian general, and Timoxenus, who he wiſhed to betray the town into his power. The hiſtorian tells us he is ignorant by what means the communication began; but that whatever information was conveyed from one to the other, was written and affixed to an Arrow, which being ſhot to a particular place, was there examined by the oppoſite party, and an anſwer returned by the ſame conveyance.†

It is not very clear by what method theſe letters were fixed to the body of the Arrow: they appear to have been wrapped on below the notch, and are ſaid to have acted as wings. But perhaps

† Herodotus, pg. 574.

haps the end of the Arrow might have been slit down a few inches, and the little scrolls inserted into it, in such manner that part should project on each side; they would then guide the Arrow in its passage as feathers. Children often *feather* their Arrows in this manner.

CHAP.

CHAP. IX.

Of QUIVERS.‡

ALL thoſe nations who have made uſe of the Bow, have found it neceſſary to adopt ſome method of carrying their Arrows, without engaging the immediate attention of their hands. The Quiver, therefore, has been in general uſe; and we have reaſon to believe its invention ſpeedily followed that of the Bow and Arrow. We find in Geneſis, that it was a concomitant of the Bow at the

time

‡ Pharetra. Sagittarum theca. Sic dicta, quod ſit quaſi φαρ©, *i. e.* veſtimentum & tegmen vulnerantium. *Suidas.*

time of Iſaac. "*Now therefore take, I pray thee, thy weapons, thy Quiver and thy Bow, and go out to the field, and take me ſome veniſon.*" This paſſage clearly points out the high antiquity of the inſtrument in Aſia; and there is no reaſon to ſuppoſe that in the other parts of the world its invention has been much poſterior to that of the Bow. We are ignorant of the form, conſtruction and materials of which Quivers were made in the time ſpoken of by Moſes; but the bark of trees, or the ſkins of animals, ſeem to be the things moſt likely to have been adopted for that purpoſe. Thoſe found among ſavages at this day, are for the moſt part formed from the materials I mention. Some of them are ornamented with elegant and curious workmanſhip, uſually compoſed of the teeth of wild beaſts, or fiſh, and intermixed with ſhells, or feathers.

The

The Quivers of the ancient Greeks, like those of many other nations, were made of ſkins, or leather. They were of various forms and ſizes. Sometimes round, ſometimes ſquare, open at the top, or cloſed with a lid; each of which kind may be perceived among figures of the Grecian warriors.* This part of the warlike dreſs was carried uſually on the back, the upper end of the Quiver juſt riſing above the right ſhoulder. It is for this reaſon Diana and Apollo are repreſented as carrying their Arrows in this manner. There is a figure from the Juſtiniani Gallery, and two from that of Verſailles, copied in the forty-ſecond Plate, Vol. I. of the Ant. Expt. of Montſaucon, all of which are beautifully arrayed in the manner ſpoken of. Theſe Quivers are all pictured without any covering to them; but we find from

 Homer,

* See Pl. 2, Fig. 7, 9, and on the Medal, Fig. 12.

Homer, that the Greeks ſometimes had a lid to protect their Arrows.†

By ſome the Quiver was uſed, not only as a caſe to convey their Arrows in, but alſo as a kind of *Roſary*, by which the events of every day were regiſtered. On retiring to reſt, the Scythian threw a ſmall ſtone into a Quiver placed near his couch, and if he had ſpent the day in comfort and to his ſatisfaction, he choſe a white pebble; but if in trouble, a black one; at death, the Quiver was reverſed and the ſtones counted, and the perſon was eſteemed to have ſpent an happy or unhappy life, in proportion as the

† τοξ᾽ ωμοισιν εχων, αμφηρεφεα τε φαρετρην.

Il. 1, *L.* 45.

Claudian alſo ſpeaks of theſe Quivers.——

" * * * * * * * * Non ſpicula poſcit

" Iſte labor; maneant clauſis nunc ſicca pharetris."

De Con. Stilick. Lib. 3, *L.* 268.

the number of the white or black ſtones predominated.§

Some of the Ethiopians are reported to have made uſe of no Quiver, but carried their Arrows ſtuck round their heads like Radii—as whimſical and inconvenient a method as they could have choſen, if it was really their cuſtom.*

The Quiver is ſaid to have been made by ſome nations from the ſkin of a large Serpent.†

The

§ *Suidas.*—Λευκὴ ἡμέρα.—and alſo, Των εις τὴν φαρετραν.

* See Lucian, ch. 28, pg. 505. De Saltat, and Claudian alſo, De Cons. Hon. Aug. Paneg. line 21.

"Ignavas Meroë traxit de crine ſagittas."

Again—

"Venerat & parvis redimitus Nuba ſagittis."

Pg. 327.

Utuntur ergo Æthiopes capite pro pharetra quod fieri potuit vitta quadam diadematc lattuſculo & foraminibus quibuſdam inſtructo, quibus ſagittæ ut vaginis induntur qua parte habent ſpicula, eminent pinnæ & formant coronas radiatas.—*Geſner ad Claudian.*

† Serpentum geſtant patulos pro caſſide rictus,
Splendent vipereæ ſquamoſa pelle pharetræ.
Claud. De Laud. Stil. L. 262.

The Normans not only conveyed their Arrows by the Quiver, but uſed it alſo as a drum, to aſſiſt the clamour they uſually raiſed at the opening of a battle.*

The Coryto, or Corytus, was another kind of caſe uſed by many nations, in order to carry their Bows in. It appears to have been made on the ſame general principle as the Quiver, and I judge it to be about the ſame length, becauſe in every repreſentation, it appears to admit half the length of the Bow. See pl. 2. fig 8 and 10 pl. 4. fig. 7.

I have not been able to find any verbal deſcription of this part of the ancient Archer's dreſs, nor have I ever ſeen one of the more modern ones.

In a figure of Tamerlane riding, which is drawn in pg. 15 Chron. Turcicorum, the

* Deinde perſtrepentibus ſecundum morem pharetris, clamor in cœlum tollitur, pugna committitur.

Hiſt. Nom. Pg. 13. *Paris* 1619. *Fol.*

the method of carrying the Corytos, with the Bow in it, when on horſeback, is ſhewn.—It is ſeen on a medal belonging to Mr. L'Abbè de Fontenu, copied by Montfaucon, Pl. 25, T. 4, and in the plate at pg. 157, of Suetonius, publiſhed by Pitiſcus, in quarto.—There are ſeveral of them likewiſe on the medals in Dr. Hunter's Muſeum.—See Hunter's coins by Combe, Pl. 3, F. 20. LI, 26, &c.

It is remarkable that in all the figures of this Bow-caſe, the Bow is repreſented as put into it ſtrung.§

§ Among poetical liberties we often ſee that the Latin word *Corytus*, or *Corytos*, is made uſe of as ſynonimous with *Pharetra*, as in this paſſage from Statius.

———" cæleſtibus implet
" Coryton telis"———*Theb.* 9—720.

And alſo,—

" Trux leva ſonat arcus, & aſpera plumis
" Terga, Cydonæa Corytos arundine pulſat."
Theb. L. 4.—68.

The ſame uſe of the word occurs in Virgil. Æneid X. L. 169; and Ovid, Triſt. Lib. V. El. 7, L. 15. But not-

notwithstanding these passages, and many more of the same signification, the critics uniformly say the Corytos was the case of the Bow, and not the Quiver.—See the note on the above passage in Virgil, Æneid X. L. 169, in the Masvicius Edition, Two Volumes Quarto, 1717. " *Coryti*, propriè sunt arcuum thecæ dicuntur tamen etiam sagittarum, quas & *pharetras* vocamus."—And also Vossius' Lex.

CHAP.

CHAP. X.

Of TARGETS.

AT the time when wars were almoſt perpetual, and the hunting of wild beaſts neceſſary, Archers could ſeldom be at a loſs for living objects againſt which to direct their Arrows; but as theſe opportunities, in the progreſs of civilization, became leſs and leſs frequent, men had then recourſe to ſtationary Targets, at which to try their ſkill, and exerciſe their art.

The heroic games inſtituted of old, tended effectually to preſerve and cheriſh

in peace, thoſe accompliſhments neceſſary in war; and the Palm, held out to the victorious in theſe combats, excited and ſpread that emulation and pride, from which all great efforts originate. Hence the *Arena* has ever been eſteemed the ſchool of valour and of martial virtues.

Archery, it muſt be confeſſed, did not hold any conſpicuous place among theſe exhibitions, at leaſt rarely. I know not, indeed, of any inſtance among the Greeks, though among the Romans there are ſeveral.

It does not appear, I believe, from any expreſs aſſertion, that the ancient Greeks had any particular places ſet aſide for the uſe of Archers; we may infer, however, that ſuch exiſted, from hints to be found in the claſſic writers.

The

The guard of Athens consisted chiefly of Archers, as did originally the Artillery Company of London; and it is not unreasonable to suppose, there may have been a *Finsbury* in Greece, as well as in England.*

Xenophon clearly mentions the ancient Butts,† and a line in Æschylus intimates that Archers were accustomed to shoot at them.‡

 The

* Sagittarii, ministri publici, custodes urbis, numero mille, qui prius, quidem, in medio foro, factis illic tabernaculis, habitabant.

B. 990, *Vol. IV. Gronov. Antq.*

† — ουδε γαρ τοξευειν οιμαι, εφη (ο Κυρ☉) ουδ' ακοντιζειν ανθρωπον επετρεπομεν υμιν, αλλ επι σκοπον βαλλειν εδιδασκομεν.

Cyr. Inst. Lib. 1 *P.* 33, *E.*

In the same book we find that boys practised at the victuals they were to eat. I have observed (page 80), this was a custom in America.

‡ Εκυρσας, ωστε τοξοτης ακρ☉ σκοπε.

Æsch. Ag. V. 637.

The Perſians of old practiſed at Shields formed of raw hides, or ſometimes of ſolid wood, which their Arrows pierced without difficulty.||

With reſpect to the Roman manners, Vegetius tells us that there were places in which the Archers and ſlingers exerciſed, and where Butts were erected for the ſoldiers to aim at.

Theſe Butts, or Targets, were ſometimes ſingle poſts only, ſometimes they were made of faggots, or ſheaves of ſtraw, and were uſually placed at the diſtance of a ſtadium, (or about ſix hundred feet) from the place in which the ſhooter ſtood.§

Theſe

|| See Briſſonius de Reg. Perſarum, pg 656.

§ Sagittarii vero, vel funditores, ſcopas, hoc eſt, fruticum vel ſtraminum faſces, pro ſingo ponebant: ita ut ſexcentos pedes removerentur à ſigno, ut ſagittis, vel certe lapidibus ex fuſtibalo deſtinatis, ſignum ſæpius tangerent.

Veget. Ch. 23, *B.* 2.

Theſe exerciſes were regulated by particular laws, and under the inſpection of maſters.* One law was ſimilar to a privilege granted by Henry VIII. to the Finſbury Archers; I mean, an indemnification from the charge of murder, if any perſon ſhooting, ſhould kill another paſſing between him and the Butt. This was enjoyed by the Roman Archers and ſlingers; but the Aquilian law denied the ſame to thoſe who uſed the other weapons, ſuch as the pilum, javelin, or plumbatum.†

The moſt extraordinary circumſtance with reſpect to the objects at which Archers directed their Arrows, occurs in an

* See Vegetius Lib. 1, Ch. 15.

† — Si in eo campo, qui exercitioni militibus deputatus erat, aliquem læderent intempeſtivè tranſeuntem, actionem legis Acquiliæ fuiſſe denegatum: at contra qui data opera in eum jaculati forent, Aquilæ tenebatur.

Veget. pg. 90.

an old French law. I am inclined to think, that it was a cuſtom to dreſs perſons over with a number of ſhields, and to ſhoot at them thus clad, as Targets. In order to prevent this, Dacobert inſtituted a law, in the year 630, inflicting a penalty of forty ſhillings for each offence.‡

The Butts formerly in uſe in this kingdom, were generally of earth; but thoſe of ſtraw are at preſent more in faſhion. The latter kind poſſeſs an advantage, as they can be moved with eaſe to any diſtance fixed upon. The manufacture of them is ſimilar to that of the common ſtraw Bee-hives; and they are uſually made about four feet and an half in diameter, that is,

‡ Si quis liberum hoſtili manu cinxerit, quod *heriraita* vocant, id eſt, cum quadraginta duobus clypeis, et ſagittam in curtim projecerit, aut quodcunque telorum genus, cum quadraginta ſolidis componat.

Capit. Reg. Franc. Baluzius, pg. 109.

is, twice the length of the Arrow. The front part is covered with cloth, painted in rings of different colours, in order to mark the reſpective degrees of merit each Arrow is entitled to. The way in which this is done, in common, is to divide the length of the Arrow into five equal parts, and taking theſe diviſions, as the radii of the different circles. The fifth part of twenty-ſeven inches, which is the length of the Arrow, is five inches 4-tenths; therefore if one foot of a pair of compaſſes be placed in the center of the Target, and a circle deſcribed with the diſtance five inches 4-tenths, the firſt circle will be ten inches 3-fourths diameter. If the foot be extended five inches 4-tenths further, the next will be twenty-one inches 1-half, and ſo on with the reſt. When all the circles are deſcribed, that part incloſed within the circumference of the firſt circle, neareſt the

the center, is usually covered with gold or silver leaf. Between the first and second circle is often a red colour, and the others varied with white, green, &c. according to the taste of the person who makes them. The surface of these coloured rings may be again subdivided into equal parts, by concentric circles at proper distances from each other. The Target, thus prepared, is fixed on a frame of wood, contrived that it may be elevated or depressed to any angle of the horizon, as the intended shots are more or less remote.

The Butts used by the Archers at Edinburgh are made on a very different principle; I mean those intended for short lengths. They are of straw, laid endways, and pressed hard with a screw; after which, the front is cut with a knife, in the manner hay is trussed. These are covered

covered with a little building, to protect the ſtraw from injury, and the ſhooter from the rays of the ſun, while drawing his Bow.

Some time ſince, a thought ſtruck me, that it would be poſſible to contrive a method of diſcharging a common gun, by connecting the Target (I mean by the Target, the mark ſhot at in ſmall diſtances) in ſuch manner that every time the Arrow pierced it, a diſcharge might take place. Accordingly, I contrived and made an apparatus, which fully anſwered what was intended. Since my invention, (as I eſteemed it,) I underſtand there are Targets ſomewhat on the ſame plan uſed in Surry; but I have never heard or ſeen in what manner the machinery is made. What I firſt uſed was a ſimple gun placed behind the Butt; to the trigger of which was faſtened a

weight, by a ſtring about a foot long. This weight could be put upon a little bracket, under which a bit of wood ſupported it. From the Target in front was a wooden rod, moving in a tube through the Butt, and placed in ſuch a poſition, that the end came exactly to the foot of the bit of wood ſupporting the bracket, having the lead weight on it. When the effect was to be produced, the gun was loaded, and cocked. The weight was placed on the bracket, with the ſupport under it. Thus ſituated, when the Arrow ſtruck the Target, and forced the rod a little backwards, the ſupport was diſplaced, the bracket fell, and diſlodged the weight, which falling, plucked the trigger of the gun, and fired it. The only difficulty I found was in making the Target, and fixing it to the rod which paſſed through the Butt. The moſt ſubſtantial way, however, appeared

to

to be that of having a piece of cork cut round, and about three inches in diameter. This was fixed in a tin box, to the bottom of which was a ferrule, wherein the end of the rod was inserted. Cork is the best substance for the above purpose; because, when the Arrow strikes it, it enters, and may be pulled back without injury: but there is nothing else I know of, which can be substituted, that will not either break the Arrow, or be broken by it. On the front of the cork, a piece of pasteboard may be fixed, to render the mark more conspicuous; and three inches appears a proper size for the Target, in shooting the distance of thirty yards.

CHAP. XI.

On the English Long-Bow.

AS the English Long-bow formerly held ſo diſtinguiſhed a rank among the military weapons of Europe, and as many of the moſt important battles and conqueſts were obtained by the aid of Engliſh Archers; it is neceſſary for me to inſiſt, at ſome length, on the hiſtory of the Bow in this iſland; were it only in compliment to the fame of our anceſtors.

Whether the eulogies which have been ſo liberally paſſed on the Engliſh Archers, by

by English writers, be perfectly just; and whether they really were more expert in the practice of this branch of war than many of the ancient nations, I think may be disputed. The perpetual attention paid to inure youth to the practice of the Bow, by many warlike people of antiquity, was, I conceive, a much more severe discipline, than that of this country. Perhaps, indeed, our Archers might derive a superiority from their Bows being constructed on better principles, being more skillfully made, and of better materials than those used in other countries.

But leaving this point undiscussed, I shall now endeavour to trace the Bow, in this island, during the early periods in which it seems to have been known; continuing the history through the several successive ages and reigns, till the period in

in which that inſtrument was diſcontinued, as a military weapon, in the Engliſh army.

Having had an opportunity of conſulting a fine collection of chronicle-writers, and hiſtorians, I have been induced to ſpare no pains in the inveſtigation of this part of my ſubject. A tedious reſearch has enabled me, however, to collect only a few ſolitary facts with reſpect to Archery in this kingdom, before the time of the Norman invaſion: but theſe few facts, I think, will prove ſufficient evidence from which to judge of the ſtate of the Bow in the early ages.

I have been much ſurprized to find, that ſome of our hiſtorians, and particularly the more modern ones, have repreſented the Engliſh at the Battle of Haſtings, as entirely ignorant of the effect of Archery;

Archery; and speak of the astonishment with which the troops were seized, in finding death inflicted on them, whilst the enemy was far at a distance. Speed observes, that the first discharge of Arrows from the Norman army, "was a kind of fight both strange and terrible unto the English, who supposed their enemy had beene already even in the middest amongst them." Echard expresses the same sentiment in his account of the battle with William. "The fight," he says, "began with great fury, order and equal bravery on both sides; in which the English were severely gaul'd by the thick showers of Arrows from the Norman *Long-bows*, before the battle joined; which was a weapon then unused in England, and thereby the more surprizing, the wounds coming from enemies so far distant, and not suddenly to be revenged."

Hume

Hume mentions nothing of this extraordinary ſurprize among the Engliſh troops, neither do Mat. Paris, nor many others. Sir J. Hayward ſays, the uſe of the Bow was firſt brought into the land by the Normans, and that afterwards the Engliſh being trained to the practice of it, became the beſt ſhooters in the world.*

That the Engliſh could be ignorant of the Bow at the Conqueſt, appears inconceivable, as both the Saxons and Danes made uſe of it in battle againſt the inhabitants of this country, for many centuries previous to that time. It is true, there is no mention made of Archers among the troops of Harold, but it does not follow that *they* were ignorant of the effect of Archery, or that the Bow was not then uſed in England.

* See Hiſtory of the Norman Kings.

At what time this inſtrument was firſt brought into the iſland, is uncertain; the hiſtory of our country extends with accuracy ſo few ages back, that it is impoſſible to aſcertain the true æra in which the Bow was introduced.

It is pretty certain, however, that the inhabitants of Britain, did not make uſe of this weapon in battle, at the time Julius Cæſar firſt viſited this country, as it is not enumerated among the arms of the natives, in the minute deſcription of them, given by that author.

The Romans, it is probable, introduced the Bow as a military weapon into Britain, as Archers often formed a great part of their auxiliary troops. The battles between the Romans and our countrymen, as deſcribed by Cæſar, do not, however, appear to have been carried

ried on by the assistance of it. But from the second book of the Commentaries, we find, that Cæsar had both Numidian and Cretan Archers in his army, when he encountered the Belgæ, in Gaul;* and it is reasonable to suppose, that he also made use of them among his troops, when in Britain, about two years afterwards.

During the reigns which succeeded that of Julius Cæsar, and when the Romans had settled themselves on this island, Archers are frequently made mention of as part of their troops;† and it is probable, that the reinforcements often sent to the army in Britain, included many Archers,

Ee 2 as

* Numidias & Cretas, sagittarios, & funditores Baleares, subsidio oppidanis mittit.

B. II. Ch. 8. *See also Ch.* 11 *and* 19.

† — και ϖρος τα ἅρματα των Βαρβάρων οἱ τοξόται των Ρωμαίων ἀντηγωνίζοντο.

Dion Cassius.—Nero, pg. 706, *C.*

as they would be employed with advantage againſt a people, to whom the uſe of the Bow was not familiar.

We may therefore conclude, from the authority of Hiſtory, that the Romans introduced the Bow into this country; and that they continued it in uſe to their final departure, about the year four hundred and forty eight.‡

In North Britain, the Bow appears to have been known at leaſt as early, as it was in the South; the works of Boethius and other hiſtorians of that country ſeem thus to intimate.

If the poems of Oſſian may be brought as evidence with reſpect to the ſtate of Archery in later times, we may perceive that they uniformly repreſent the Bow, as an attendant on the warrior and hunter.

We

‡ See Hume's Hiſt. Vol. I. pg. 13.

We learn alſo from ſome paſſages in theſe poems, that the Yew tree was then employed to form theſe weapons; "Go to thy cave my love till our battle ceaſe on the field. Son of Leith, bring the Bows of our fathers! the ſounding quiver of Morni! Let our three warriors bend the *Yew*."§

Immediately on the Britons finding themſelves deſerted by the Romans, they ſought aſſiſtance from the Saxons, againſt their enemies the Scots; who haſtening to their relief, entered this iſland with an army, about the year four hundred and forty nine. Theſe people are ſaid to have uſed both the long and croſs Bows, and we may therefore be led to conclude, that Archery was ſtill cheriſhed in this country by the new invaders.

During

§ Vol. I. pg. 120. See alſo pgs. 156, 389, and Vol. II. 115. Oſſian is ſuppoſed to have lived about three centuries after Cæſar.

During the Saxon Heptarchy, we find that Offrid, the ſon of Edwin, king of Northumbria, was killed by an Arrow, in a battle between the troops of that king and the united army of Mercians and Welſh, which was fought, about the year ſix hundred and thirty three, near Hatfield in the Weſt riding of Yorkſhire. But except this fact, little relating to the Bow appears in our annals of the Saxon æra.

The Danes, as they arrived at a later period than the Saxons, come next under our review. Theſe warlike people were accuſtomed to the uſe of Archery in battle, and we find it often noticed in this period, by our early chronicle writers. About the year eight hundred and ſeventy, they became very formidable, and committed great depredations on the inhabitants of Eaſt Anglia. In one of their battles with the

the East Angles, they overcame their enemies, and took prisoner Edmund, king of that part of the island, whom, after insulting with many indignities, they bound to a stake, for the Danish Archers and Javelinmen to aim at; putting him to death by that cruel and ignominious expedient.*

During the reign of Alfred, it seems probable, that Archery was much in use, both in the army of the Danes,† and in that

* Regem etiam ejusdem provinciæ (Estangliæ) sanctissimum Edmundum captum per eosdem, & ad quendam stipitem alligatum, tanquam signum ad sagittam, barbari, crudelissimi telis suis, & sagittis aggressi sunt, horrendaque crudelitate persodientes, pro fide Christi, &c.

Ingulphi Hist. pg. 494.
Anglic Rer. Script. Post. Bedam.

† Porro Christiani pro paucitate sua in unum concum conglobati, contra sagittarioum (Danorum) impetum durissimam testudinem clypeorum—prætendebant.

Cumque sic invicti—ac adversariorum sagittarii tela sua in vacuum perdidissent.

Ann. 870.—*Chron. J. Abbatis, St. Pet. de Bergo, Pg.* [illegible]

that of Alfred. I am inclined to this opinion from a paſſage in Aſſerius, who relates a curious anecdote concerning our good king. Alfred took refuge from the perſecution of the Danes, at a poor cottage, where he reſided unknown to his benefactors, who little imagined their roof protected a royal gueſt. It happened one day, ſays that writer, as the king ſat by the fire preparing his *Bow, Arrows, and his other warlike inſtruments*, that the farmer's wife had placed ſome bread cakes upon the hearth to bake, ſuppoſing he would take care to turn them as they occaſionally required. He, however, neglected to do ſo; and the poor woman enraged to ſee her cakes ſcorching by the heat, ran in haſte to ſave them, and ſaying to the ſtranger, "*Thou fellow!* (as Speed tranſlates it) *doeſt thou ſee the bread burne before thy face, and will not turn it? and yet art thou glad to eate it before it be half*

half baked?"‡ Bows and Arrows are here called warlike inſtruments, and we may with reaſon preſume, therefore, that they were uſed among the other weapons in battle. Polydore Vergil confirms this ſuppoſition; for ſpeaking of the troops of Ethelred, of which, part were commanded by his brother Alfred, he ſays, a great number of *Archers* were placed in the right wing of the army.‖

‡ "Contigit autem die quodam, ut ruſtica, uxor, videlicet illius vaccari, pararet ad coquendum panes. Et ille rex ſedens ſic circa ſocum præparavit ſibi *arcum & ſagittas, & alia bellicorum inſtrumenta.* Cum vero panes ad ignem poſitos ardentes aſpexit illa infælix mulier, feſtinanter currit, & amovit eos, increpans regem inviĉtiſſimum et dicens: Heus homo:"

"Urere quos cernis panes, gyrare moraris,
"Cum nimium guades hos manducare calentes?"

Aſſer. Ælfredi rebus jeſtis, pg. 9.

‖ —— in dextro vero cornu, altera parte equitum cum bene magno ſagittariorum numero, et peditum avit ubi ipſe (Ethelred) erat.

Polyd. Verg. Hiſt. Angl. pg. 98—6.

From this time till the æra of the Norman invaſion, little occurs with reſpect to Archery; but it is well known how ſucceſsfully it was introduced by William, at the battle of Haſtings.

Bows and Arrows, are ſpoken of at this fight, by all our hiſtorians: and the cataſtrophe of the battle fully proves the advantage which the invaders derived from theſe weapons. Many of our early writers, neglect to particularize the kind of Bow made uſe of by the Norman army, but John Roſs, expreſsly ſays, the Long-bow was uſed.* Mr. Barrington is of opinion, that the Croſs-bow was the inſtrument principally employed in the army of William, and the paſſages which have occured to my obſervation, ſeem to prove the

* Ipſe (Willielmus) uſum *longorum arcuum* & ſagittarum in Angliam primus inducebat, cum eis Angliam conqueſtione vincens.

Chron. J. Roſſi, pg. 109.

the truth of his conjecture. From Sir John Hayward's account of William, it seems almost certain, that he himself used the Cross-bow; but this part of my subject will be more properly defered, till I treat on that weapon.

No circumstance worthy of observation occurs in our history, from the conquest till the time of Henry the Second, in whose reign, Archery seems to have been first carried into Ireland, by the troops of that king. Lord Lyttleton, in his history of the life of Henry, says, " it is strange that the Irish, who had much intercourse with the Welsh before Henry the Second's time, should not have learnt from that nation, who greatly excelled in Archery, that Arrows were better weapons to annoy an enemy with than stones, thrown by the hand without the help of slings,

which, unleſs at a ſmall diſtance, could have little or no effect." The ſame author obſerves,* that "from many inſtances, in the courſe of theſe wars, (the wars of Henry with the Iriſh) it appears, that the Engliſh conqueſts in Ireland, were principally owing to the uſe of the Long bow in battle, which the Iriſh infantry wanted: And therefore *Giraldus Cambrenſis*, in his chapter entitled, *Qualiter Hibernica gens ſit expugnanda*, adviſes, that in all engagements with that people, Archers ſhould be intermingled with the heavy-armed troops.†

To

* Vol. 6. Pg. 392.

† Theſe are his words:—In Hibernicis autem conflictibus & hoc ſummoperè curandum, ut ſemper ſagittarii militaribus turmis mixtim adjiciantur; quatenus & lapidum (quorum ictibus graves & armatos cominus appetere ſolent, et indemnes agilitatis beneficio, crebris accedere vicibus et abſcedere) e diverſo eminus ſagittis injuria propulſetur."

To ſhew how worthy of imitation the Welſh were, at the time of Henry II. in the uſe of the Bow; I ſhall relate a few exploits performed by their Archers, as they are reported by Giraldus Cambrenſis.

There is a particular tribe in Wales, ſays this ancient writer, named the Venta; a people brave and warlike, and who far excel the other inhabitants of that country in the practice of Archery. In ſupport of this laſt aſſertion, the following inſtance is recorded. During a ſiege, it happened, that two ſoldiers running in haſte towards a tower, ſituated at a little diſtance from them, were attacked with a number of Arrows from the Welſh; which being ſhot with prodigious violence, ſome penetrated through the oak doors of a portal, although they were the breadth of four fingers in thickneſs. The heads

heads of theſe Arrows were afterwards driven out, and preſerved, in order to continue the remembrance of ſuch extraordinary force in ſhooting with the bow. It happened alſo in a battle, at the time of William de Breuſa, (as he himſelf relates) that a Welſhman having directed an Arrow at an horſe-ſoldier of his, who was clad in armour and had his leather coat under it; the Arrow, beſides piercing the man through the hip, ſtruck alſo through the ſaddle and mortally wounded the horſe on which he ſat. Another Welſh ſoldier, having ſhot an Arrow at one of his horſemen, who was covered with ſtrong armour in the ſame manner as the before mentioned perſon, the ſhaft penetrated through his hip and fixed in the ſaddle: but what is moſt remarkable, is, that as the horſeman drew his bridle aſide in order to turn round, he received another

ther Arrow in his hip on the oppoſite ſide, which paſſing through it, he was firmly faſtened to the ſaddle on both ſides.§

Nothing

§ The curious paſſage from which the above circumſtances are taken, ſtands thus in the original:

"Hoc autem mihi notabile videtur, quod gens hæc, quæ Venta gens vocatur, et Martiis conflictibus uſitatiſſima, & ſtrenuitatis opera laudatiſſima, & arte ſagittandi præ ceteris Cambriæ finibus inſtructiſſima reperitur. Ad hujus autem aſſertionis ultimæ certitudinem exempla proponere non pigeat. In extrema Caſtri prædicti expugnatione noſtris diebus perpetrata, militibus duobus in turrim cumulato terrarum aggere ſitam per pontem transſugientibus, Wallenſes ut ipſos á tergo percuterent, ſagittas arcu mittentes portam turris iliceam, palmaris fere ſpiſſitudinis tranſpenetrarunt, ad tantorum ictum vehementiæ perpetuam memoriam ſagittis in porta ferro repercuſſo reſervatis. Accidit & tempore Gulielmi de Breuſa (ipſo teſtante) quendam mil'tem ſuum it conflictu contra Wallenſes a quodam ipſorum per mediam coxam cum panno loricæ ocriali ferro utrinque veſtitam ſagitta percuſſum eſſe, eadem quoque ſagitta per partem illam ſellæ, quæ alva vocatur, uſque ad ipſum equum lethaliter tranſpenetrante. Alia quoque ſaqitta militis alterius coxam ferro ſimiliter utrinque munitam cum panno loricæ uſque in ſellam perforavit. Et cum miles ille locis equum in gyrum flecteret: alio ſagittam eodem contorquente, in oppoſita coxa ſimilem ictum ſuſcepit, equo ab utraque parte firmiter affixus."

Itinerar. Cambriæ. Gir. Camb. Pg. 835—20.

Nothing particularly applicable to the Long-bow (for I do not mean that Archery remains unnoticed) is to be found in our early hiſtorians, during the reigns immediately following, till that of Edward III. in whoſe time this weapon is ſuppoſed to have been much in uſe.* Mr. Barrington entertains this opinion very reaſonably, from circumſtances which occured at the battle of Crecy. The Arbaleſts in the hands of the Genoeſe, were all expoſed to a violent ſtorm, which happened juſt before the battle commenced. This ſtorm falling on the ſtrings of their Bows, relaxed them ſo far, as to render them incapable of proper ſervice; while on the other hand, the Engliſh Bows were kept in their caſes during the rain and were not injured. From hence Mr. Barrington concludes, the Engliſh uſed the Long-bow

* I have not mentioned the death of William II. as it is uncertain whether the Long-bow or Arbaleſt diſcharged the Arrow which proved fatal to him.

bow, as that inſtrument was uſually provided with a caſe, but the Croſs bow, being of ſo inconvenient a ſhape, could not be provided with ſuch covering. Indeed this latter kind of Bow, is not ſaid to have been even furniſhed with a cover, as far as I have been able to find.

The Battle of Crecy, as well as that of Poictiers, (where the Archers poured forth their Quivers in ſuch bloody victories,*) intimates the Bow to have been highly cultivated by the Engliſh at thoſe times; but it was found neceſſary by Edward to enforce the practice of Archery during the peace which followed, as the ſoldiers rather attended to other amuſements, than Archery.

During the reign of Richard II. little is recorded with reſpect to the Bow.

 We

* — "innumera laxarunt cæde pharetras."

We find, however, from Hollinshead, that a number of Archers were sent at the request of the Genoese, to assist them against the Saracens on the coast of Barbary; and that they performed some meritorious exploits with their Long-bow.†

From a passage in Stow, we find Richard II. to have had a very numerous guard of Archers; for in the year 1397, as one day the members were leaving the Parliament House, "a great stir was made as was usual; whereupon the King's Archers, in number four thousand, compassed the Parliament-house, thinking there had been some broil, or fighting, with their Bows bent, their Arrows notched, and drawing, ready to shoot, to the terror of all that were there: but the King coming pacified them."‡

The

† Hollinshead, Chron. Vol. III. pg. 473.

‡ Stow, pg. 316.

The most memorable circumstance with respect to the Bow, which occurred in the reign of Henry IV. was the victory gained over the Scots near Halidowne-hill, in the year 1402; "where," in the words of an old historian, "the Lord Percies Archers did withall deliver their deadly Arrowes so lively, so couragiously, so grievously, that they ranne through the men of armes, bored the helmets, pierced their very swords, beat their lances to the earth, and easily shot those who were more slightly armed, through and through."§

The battle of Agincourt, which happened in the year 1415, under Henry V. is the next signal victory ascribed to the

 English

§ As a contrast to this barbarous, though energetic passage, I will quote the description of a furious Arrow, from Lucan.

"Haud unum contenta latus transire, quiescit:
"Sed pandens perque arma viam, perque ossa, relicta
"Morte, fugit: superest telo post volnera cursus."
Pharsalia, Lib. 8.

Englifh Archers, who deftroyed a great number of the French cavalry, by their yard long Arrows. This, indeed, feems the laft very important action in which Archery is much fpoken of, and although the ufe of it was continued through feveral fucceeding reigns, it at length feems to have been cultivated more as an amufement, than for real military fervice.*

The

* It is faid, that James I. of Scotland, during his long confinement in England, in the beginning of the fifteenth century, was fo ftruck with the fpirit and gallantry of the Englifh Archers, that on returning to his own country, he eftablifhed Royal Companies of Bowmen in different parts of his dominions. The art of fhooting with the Bow, is at prefent regularly practifed, by numerous Societies; and the Pepingoe is annually celebrated at Kilwinning, in the weft of Scotland, by the gentlemen of the neighbourhood. The Pepingoe (or Popingay, a mark formed like a parrot) is projected two or three feet from the top of the church fteeple, and they fhoot at it perpendicularly, refting their left foot on the bafe of the tower. The Royal Company of Archers at Edinburgh, confifts of the principal nobility and gentry of that kingdom, to the number of eight or nine hundred members. Maitland, in his hiftory of Edinburgh, informs us, that this Society was founded about the year 1676; and that it was erected into a cor-

The amusement was extremely fashionable in the time of Henry VIII. and Hollinshead reports, that that prince shot as well as any of his guard.

Edward VI. is said, by Mr. Barrington, to have been fond of the exercise of Archery.‡

Charles I. appears to have amused himself in this way also, and is represented in the frontispiece of Markham's Art of Archery.

corporation by Letters Patent from Queen Anne, dated the 31st of December, 1713. As the articles by which the Society is regulated are too long to be inserted in this place, I shall extract the whole account from Maitland's history, in the Appendix; to which I refer the reader. If we may judge from the compliments of a Poet, this Society seems to have flourished with great spirit in the beginning of the present century. I allude to Allan Ramsay's works; among which there are several poems addressed to the Archers of Edinburgh, and which celebrate their skill. Among others, the Duke of Hamilton receives a few lines on his having shot an Eel in the neck.

‡ Mr. B. refers to that Prince's manuscript journal, in the British Museum.

Archery, (1634) in the attitude and dreſs of a Bowman.

During the reigns of Charles II. and James II. the amuſement was continued, and the former ſometimes attended at exhibitions of ſhooting. The Artillery Company, or Finſbury Archers, have ſurvived even to the preſent time, but except in that ſociety, the Bow, till within theſe ten years, was very little known in the kingdom. At preſent, indeed Archery gains favour, and many companies are formed, for the practice of that amuſement.†

The

† Of theſe Societies, I believe the following are the principal: viz.

The Hon. Artil. Comp.
Royal Edinburgh
Toxophilite
Woodmen of Arden
Royal Kentiſh Bowmen
Royal Britiſh Bowmen
Robin Hood Bowmen
Loyal Archers
Yorkſhire Archers
Hainhault Foreſters
Southampton Archers
Bowmen of Chiviot Chaſe
Kentiſh Rangers
Woodmen of Hornſey
Surry Bowmen
Bowmen of the Border
Mercian Bowmen
Broughton Archers
Staffordſhire Bowmen
Trent Archers

The exact time in which the Bow became disused in war by the English army, perhaps, cannot be fixed. P. Daniel mentions, that Arrows were shot by the English at the Isle of Rhé, in 1627.* Mr. Grose informs us, that in 1643, the Earl of Essex issued a precept "for stirring up all well-affected people by benevolence, towards the raising of a company of Archers for the service of the King (Charles I.) and the Parliament." And in a pamphlet, says the same author, which was printed anno 1664, giving an account of the success of the Marquis of Montrose against the Scots, bowmen are repeatedly mentioned. One Neade, in the reign of Charles I. obtained a commission under the Great Seal, wherein, he and his son, were empowered to teach the combined management of the pike and

* P. Daniel, Vol. I. Pg. 427.

and Bow. A book entitled "*The double armed man,*" ſhewing the proper exerciſe and attitudes, was written and publiſhed by William Neade, about the year 1625. It contains nothing of conſequence relating to Archery, but we may judge that that art was not laid aſide at this period.‡

Having related what hiſtory affords with reſpect to our ancient Archery, I ſhall now take a view of the ſtatutes which have been formed for the regulation and encouragement of this art. Mr. Barrington has already traverſed this path, and it is neceſſary for me to ſay, that his Eſſay has greatly facilitated the compoſition of this part of my ſubject.

Very ſoon after the Conqueſt, we find Archery to have been much cultivated, and

‡ See Groſe's Hiſt. of Army. Vol. I.

and large numbers of Archers brought into the field. Even as early as the beginning of the twelfth century, a law was instituted with respect to the practice of Archery, which freed from the charge of murder, any one who in practising with Arrows or Darts, should kill a person standing near.† This I believe is the first regulation to be found in our annals, and it appears to have been overlooked by Mr. Barrington, and Mr. Grose.

Till the time of Edward III. no law seems to have passed with respect to Archery. This prince, however, found it necessary to enjoin the practice of the Bow, by two mandates during his reign; and in the reign of Richard II. an act was made to compel all servants to shoot on Sundays and Holidays.

 The

† "Si quis ludo sagittandi, vel alicujus exercitii jaculo, vel hujusmodi casu aliquem occidat, reddat eum."

Laws of Henry I. Ch. 88. *Camb.* 1644. *Fol.*

The 7. Henry IV. complain of the negligence of the arrow-ſmiths, and ordains that the heads of Arrows ſhall in future be well boiled and brazed, and hardened at the points with ſteel; under the pain of the forfeiture of all ſuch heads otherwiſe manufactured, and impriſonment to the makers: All Arrow heads to be marked with the maker's name.

Henry V. ordered the Sheriffs of ſeveral counties, to procure feathers from the wings of geeſe, picking ſix from each gooſe.

In the time of Edward IV. an act paſſed, ordaining every Engliſhman to have a Bow of his own height, and during the ſame reign, Butts were ordered to be put up in every townſhip, for the inhabitants to ſhoot at, on feaſt days, and if

if any neglected, the penalty of one half-penny was incurred.

The 1. Richard III. 11. complains that by the seditious confederacy of Lombards using divers ports of this realm, the Bowstaves were raised to an *outrageous* price, that is to say, to eight pounds an hundred, were they were wont to be sold at forty shillings. This act therefore, provides that ten Bowstaves shall be imported with every butt of Malmsey or Tyre wines, brought by the merchants trading from Venice, into this land, under a penalty of thirteen shillings and four-pence, for every butt of the said wines, in case of neglect.

The 3. Henry VIII. 3. orders all men under the age of forty, to have Bows and Arrows, and to use shooting, some certain persons only excepted.

The 33d. Henry VIII. 9. is a ſtatute principally referring to Archery. It opens with a complaint on account of the decay of this art. It ordains that all men under ſixty (except ſpiritual men,* Juſtices, &c.) ſhall

* Spiritual men ſeem to have been as fond of Archery formerly as any other perſons. Aſcham teaches us, that the biſhops practiſed Archery in his time, and we find the following account of a biſhop ſhooting at Utrecht.

" L'Evêque leur montroit exemple, & après avoir ſanctifié la fête par une proceſſion, il ſe mèloit parmi les tireurs, & devenoit *Roi de l'Arc*, faiſant voir qu'il les ſurpaſſoit autant en adreſſe qu'en dignitè.

Bib. Univerſelle.

Another curious paſſage from Biſhop Latimer's ſixth ſermon, will ſhew how great an advocate for Archery he was, even in the pulpit. The Reformer preached the ſermon before the King; and after condemning the vices of the age, he thus introduces the ſubject of Archery:—" The arte of ſhutynge hath ben in tymes paſt much eſtemed in this realme, it is a gyft of God, that he hath geven us to excell all other nacions wythall. It hath bene Goddes inſtrumente, whereby he hath gyven us manye victories agaynſte oure enemyes. But nowe we have taken up horynge in townes, inſteede of ſhutynge in the fyeldes. A wonderous thynge, that ſo excelente a gyft of God ſhoulde be ſo lyttle

ſhall uſe ſhooting with the Long-bow, and ſhall have a Bow and Arrows ready continually in their houſe. And that every perſon having a man-child, or men-children in his houſe, ſhall provide a Bow and two ſhafts for every ſuch man-child being ſeven years old and upwards, till of the age of thirteen, in order to promote ſhooting. And if the young men be ſervants, the expence of the articles ſhall be abated in their wages. When of

lyttle eſteemed. I deſire you, my Lordes, even as you love honoure, and glorye of God, and intende to remove his indignacion, let there be ſent fourth ſome proclimacion, ſome ſharpe proclimacion, to the Juſtices of Peace, for they do not thyr dutye. Juſtices now be no Juſtices; ther be many good actes made for thys matter already. Charge them upon their allegiance, that thys ſingular benefit of God may be practiſed; and that it be not turned into bollyng, and gloſſyng, and horing, wythin the townes; for they be negligente in executying theſe lawes of ſhutynge. In my tyme, my poore father was as diligent to teach me to ſhute, as to learne any other thynge; and ſo I thinke other menne dyd thyr children. He taught me howe to drawe, howe to lay my bodye in my Bowe, and not to drawe wyth ſtrength of armes, as other nacions do, but wyth ſtrength

of the age of seventeen years, the young men are to provide a Bow and four Arrows for themselves, and use shooting; and if a master or father permit his servants or children, being seventeen years of age, to lack a Bow and Arrows for the space of a month, the said master or father shall forfeit six and eight-pence for every offence. Also every servant upwards of seventeen and under sixty years of age, shall pay six and eight-pence if he be without a Bow and four Arrows for one month.

It

strength of bodye. I had my Bowes bought me according to my age and strength, as I encreased in them; so my Bowes were made bigger and bigger: for men shall never shute well, excepte they be brought up in it. It is a goodly arte, a holesome kynde of exercise, and much commended in phisike. Marcilius Sicinus, in hys boke *de triplici vita* (it is a greate while sins I red hym nowe); but I remember he commendeth thys kinde of exercise, and sayth, that it wrestleth agaynste manye kyndes of diseases. In the reverence of God, let it be continued. Let a proclamacion go furth, charging the Justices of Peace, that they see such actes and statutes kept, as were made for thys purpose."

Latimer's Sermons, Black Letter, 1549, 12mo.

It is alſo enacted, that no perſon under the age of twenty-four, ſhall ſhoot at a ſtanding mark, except it be a rover, where he may change his ground every ſhot, under a penalty of four-pence each ſhot. And no other perſon above twenty-four, ſhall ſhoot at any mark of eleven ſcore yards, or under, with any prick ſhaft, or flight Arrow, under pain of ſix ſhillings and eight-pence every ſhot.

No perſon under ſeventeen ſhall uſe a Yew Bow, under a penalty of ſix ſhillings and eight-pence, unleſs he have lands of the value of ten pounds yearly, or have moveables of the value of forty marks.

The inhabitants of every city, town and place, are ordered by this act to erect Butts, and uſe ſhooting on holidays, and at every other convenient time.

On

On account of the greater price and excellence of Yew, it is enacted by this law, that Bowyers ſhall make four Bows of ordinary wood, as Elm, Aſh, Wych, Hazil, &c. for every one of Yew; and on neglect they ſhall incur a penalty of three ſhillings and four-pence for every ſuch Bow deficient.

All artificers of Bows, Arrows, &c. are by this ſtatute obliged, on the command of the King, Lord Chancellor, &c. to go from London to inhabit any town deſtitute of ſuch artificers, where they may be ordered, on the penalty of forty ſhillings a-day during their abode, after receiving proper notice.

Aliens are prohibited from ſhooting without the King's licence; and may not tranſport Bows into foreign countries.

Henry VIII.

Henry VIII. beſides making laws in favour of Archery, in the twenty-ninth year of his reign, inſtituted a ſociety for the practice of ſhooting, under a charter, in the name of the Fraternity of St. George. This King was alſo very fond of the amuſement, and ſometimes attended to ſee the Archers. It is ſaid, that one day having fixed a meeting of them at Windſor, a perſon of the name of Barlow far out-ſhot the reſt; which pleaſed the King ſo much, that he told Barlow he ſhould be called the Duke of Shoreditch, being an inhabitant of that place. This dignity was long preſerved by the Captain of the London Archers, who uſed to ſummon the officers of his ſeveral diviſions, by the titles of Marquiſſes of Barlow, Clerkenwell, Iſlington, Hoxton, —Earl of Pancraſs, &c.

The king granted alſo to this fraternity a privilege, that if any of the members

 ſhooting

ſhooting at a known and accuſtomed Butt, having firſt pronounced the word FAST, (or ſtand faſt) ſhould happen to kill any perſon paſſing between the ſhooter and the Butt, he ſhould not ſuffer, or be impriſoned.†

There are other ſtatutes which are calculated to fix the price of Bows, the regulations in which are the following.

During the reign of Edward III. a painted Bow ſold for one and ſix-pence, and a white or unpainted one for a ſhilling. By 24. Edward IV. 4. Bows of Yew were to be ſold for three and four-pence. By 33. Henry VIII. 9. no Bowyer was to ſell to a perſon between ſeven and fourteen years of age, any Bow for more than one ſhilling, and was to have Bows of all

† This was copied from the Roman Law, both by Henry I. and Henry VIII.

all prices, from six-pence a piece to a shilling, for persons of that age. And no Bowyer was to sell any Elk-yew Bow, for more than three shillings and four-pence.

By 8. Eliz. 10. Bows of foreign Yew were to be sold at the price of six shillings and eight-pence. A second sort at three shillings and four-pence, and a third kind at two shillings.

Arrows in the time of Edward III. were sold at one shilling and two-pence per sheaf, (each sheaf consisting of twenty four) if they had sharpened points, but if blunt headed, they were only one shilling per sheaf. The iron from which the best points were made, is said to have been that of anchor flooks.

From ſeveral ſtatutes which have been made for the encouragement and enforcement of the practice of Archery, as well as from the complaints of our old hiſtorians of the negligence of people in exerciſing, it is reaſonable to ſuppoſe that Archers were not then ſo expert as in more early periods. I ſhould imagine from the victories in the time of Edward III. and from the encomiums paſſed on the Bowmen of thoſe days, that Archery in that reign, was in its higheſt perfection. We are taught to believe, that the battle of Crecy, was the *chef d'œuvre* of the Long-bow, but it does not add to the honour of our Archers, when we hear that all the Bow-ſtrings of the Genoeſe Arbaleſters, were ſpoiled by rain before the battle commenced. However, the ſkill of king Edward's bowmen is undoubted, as there were other victories beſides that of Crecy, in which the Archers

Archers ſufficiently proved their excellence. Hollinſhead, who wrote in the ſixteenth century, laments the decay of Archery in his time, and praiſes Edward's bowmen in the following curious manner. "In times paſt," ſays he, "the chief force of England conſiſted in their Long-bows. But now we have in a manner generally given over that kind of artillery, and for Long-bows indeed, do practiſe to ſhoot compaſs for our paſtime. Cutes, the Frenchman, and Rutters, deriding our new Archery in reſpect to their croſlets, will not let in open ſkirmiſh, if any leiſure ſerve to turn up their tails and cry, *ſhoote Engliſhmen*; and all becauſe our ſtrong ſhooting is decayed and laid in bed. But if ſome of our Engliſhmen now lived, that ſerved King Edward III. the breech of ſuch a varlet ſhould have been nailed to his bum with

an

an Arrow, and another feathered in his bowels." &c.*

Having traced the Bow in England to the period in which it almoſt ceaſed to be a military weapon in our army, I ſhall now digreſs a moment to view the ſtate of Archery in France.

The Bow has not always been a warlike weapon in France. Procopius ſays, that in the expedition of the Franks under Theodebert (A. D. 538) the troops were armed with a ſword, ſhield, and hatchet, or rather battle-axe; they had neither Bow nor Lance. This is likewiſe obſerved by Gibbon, who I preſume derived his information from the ſame ſource, though there is no reference to his authority at this part.† There are paſſages,

* Hollinſhead, Chron. Vol. I.—198.

† See Hiſt. Roman Empire, Vol. IV. Pg 199. 4to Edit.

paſſages, however, in the Salic Law, quoted by Father Daniel, which ſeem to diſagree with the words of Procopius. In chapter xx. *de vulneribus*, it ordains a penalty of ſixty-two pence in gold, to be required from any one who ſhould wound another with a poiſoned Arrow.|| And in chapter xxxii. (*de debilitatibus*) it aſſigns a pecuniary fine for any one, who ſhould maim the ſecond finger of another, uſed in drawing the Bow.§ But notwithſtanding theſe paſſages involve the idea of the exiſtence of Archery, yet it is ſuppoſed the Bow was an inſtrument of the chace, not of war; and P. Daniel remarks, that it was ſometimes uſed in ſieges, and in entrenchments, but not in the field of battle.

In

|| Si quis alterum de ſagitta toxicata percutere voluerit, &c.

§ Si ſecundum digitum quo ſagittatur, excuſſerit, &c.

In the end of the ſixth century, however, Archery appears to have been uſed;‡ and a law of Charlemagne, made in the ninth century, directs that thoſe armed with clubs, ſhould diſcontinue them, and ſhoot the Bow.||

During the intermediate reigns to that of Lewis XI. Archers were employed in the French armies; but about the year 1480, this king diſmiſſed that part of his troops, and in their place procured Swiſs infantry.*

Archers, however, ſeem to have been again in uſe among the French armies, during the ſucceeding reign of Charles VIII. as Philip de Comines makes mention

‡ Daniel, Pg. 24. Vol. I.

|| Quod nullus in hoſte baculum habeat ſed arcum.
Capit. Rig. Franc—Baluzius, Pg. 510.

* Daniel, Vol. I. Pg. 252.

mention of them at the battle of Fornova, (or Fournue) at which there were many Scotch Archers.‡

During the time of Francis I. the Bow ſeems to have been almoſt entirely diſuſed. P. Daniel ſays, that in the year 1522, there was but one Arbaleſter in the army, at the fight of Bico; but this one Archer was ſo expert, that an officer named Jean de Cardonne, having opened the vizor of his helmet to take breath, this man ſtruck him in the unguarded part with his Arrow and killed him.†

Though the Bow was not uſed in this expedition, it was ſtill practiſed by the inhabitants of Gaſcony; and in the reign of Francis I. was ſtill introduced in battle.§

‡ See Mem. P. de Comines, B. 8. Ch. 6.

† Daniel, Vol. I.—427. § Daniel, Vol. I. 426.

Fire-arms after this time became more general, and in a ſhort period altogether excluded the Bow and Arbaleſt, as warlike inſtruments.

The name of Archers, however, was continued to thoſe in particular offices for ſome years, and even to the preſent day the miniſters of executive juſtice, retain the title.

The decay of the uſe of the Bow, in our country, ſo much regreted by Engliſh writers, was attributed to two cauſes; firſt the faſcination of ſeveral games and diverſions to which the yeomanry were partial; and ſecondly, the introduction of fire-arms.

We cannot wonder that the unvaried uſe of the Bow, ſhould in the proceſs of time become irkſome; and it is reaſonable

to

to ſuppoſe, that ſoldiers tired with war, would feel greater pleaſure in trivial amuſements, if new, than in the familiar practice of Archery. The natural love of variety would ſoon operate, ſo as to make compulſive laws neceſſary.

With reſpect to the ſecond cauſe, the introduction of artillery; it was ſlow, but at length efficacious in ſubverting the uſe of the Bow in battle.

It long remained a doubt which was the moſt advantageous weapon, the Muſket or Bow. The doubt continued more than two centuries after the uſe of artillery in action, and even in the time of Elizabeth, the preference was by many, given to the Bow.

Sir John Hayward, in his life of the Norman kings, (printed 1613) after

ſpeaking of the effects of Archery at the battle of Haſtings, compares the advantages of fire-arms, with thoſe of the Bow and aſſigns four reaſons for deciding in favour of the latter. "Firſt," ſays he, "for that in a reaſonable diſtance, it is of greater, both certainty and force. Secondly, for that it diſchargeth faſter.‖ Thirdly, for that more men may diſcharge therewith at once; for only the firſt ranke diſchargeth the piece, neither hurt they any, but thoſe that are in front; but with the Bow, ten or twelve rankes may diſcharge together, and will annoy ſo many rankes of the enemies. Laſtly, for that the Arrow doeth ſtrike more parts of the body; for in that it hurteth by diſcent; (and not only point blanke like

‖ Mr. Groſe informs us, an Archer could formerly ſhoot ſix Arrows in the time neceſſary to charge and diſcharge a muſket. And I have heard a gentleman ſay, he himſelf could ſhoot twelve Arrows into a circle not larger than the circumference of a man's hat, at the diſtance of forty yards, in a minute.

like the bullet) there is no part of the body but it may ſtrike; from the crown of the head, even to the nailing of the foot to the ground. Hereupon it followeth, that the Arrows falling ſo thick as hail upon the bodies of men, as leſs feareful of their fleſh, ſo, more ſlenderly armed than in former times, muſt neceſſarily worke moſt diſaſtrous effects."

An old writer (quoted by Dr. Johnſon) ſays,

> The white faith of hiſt'ry cannot ſhew,
> That e'er a muſket yet could beat the Bow.
>
> *Alleyn's* Henry VII.*

If we conſider the unſkilful contrivance of the muſket, at the time Archery was in uſe in war, we ſhall not be ſurprized that the Bow remained in favour ſo long; indeed,

* We may remark, that at the victory of Crecy, no part of the honour or advantage is attributed to the artillery uſed by Edward.

indeed in the preſent day, although fire-arms are much improved, there is reaſon to ſuppoſe the Bow would be of great ſervice on many occaſions, and particularly againſt cavalry.

Sir John Hayward obſerves, that "a horſe ſtroke with a bullet, if the wound be not mortal, may performe good ſervice; but if an Arrow be faſtened in the fleſh, the continual ſtirring thereof, occaſioned by the motion of himſelfe, will enforce him to caſt off all command, and either beare down or diſorder thoſe that are neere."†

He proceeds to add, "that ſome thought the cracke of the peice, ſtrikes terrour

† Virgil thus deſcribes a wounded horſe—

——ferrumque ſub aure reliquit,
Quo ſonipes ictu furit arduus, altaque jactat
Vulneris impatiens, arrecto pectore crura:
Volvitur ille excuſſus humi.

Lib. 11,—637.

terrour into the enemy. But uſe, ſays he, will extinguiſh theſe terrours. And if it be true, which all men of action doe hold, that the eye in all battailes is firſt overcome, then againſt men equally accuſtomed to both, the ſight of a ſhower of Arrows is more available to victory then the cracke of the piece."‡

AS the Arrow muſt neceſſarily be elevated in ſhooting to a diſtance, Archers may be placed in almoſt any poſition, with reſpect to the other parts of the army; and accordingly we find, that in both ancient and modern tactics, they have been placed in the rear, as well as the

‡ In ancient battles, when myriads of Archers were introduced, the appearance of a diſcharge of Arrows from the whole army, muſt have been inconceivably awful. How frequently do we meet with ſuch expreſſions as theſe—excelucere diem telis—grandine ferri—&c. There is a well known reply of Dioneces, to a per-

the front. Indeed contingent circumſtances, ſuch as the face of a country, whether woody or open, whether mountainous or plain, would require a varied diſtribution of the lines of an army.

Archers uſually occupied the front, and retired between the ranks of the heavy-

a perſon who informed him at the battle of Thermopylæ, that the Perſian army was ſo numerous, as to obſcure the light of the ſun with their Arrows, "we ſhall then fight in the ſhade, ſaid he, and not expoſed to the heat."

Herod.—pg. 522

We may judge alſo, of the immenſe number of Arrows expended in an engagement, from a circumſtance mentioned in the Anabaſis of Zenophon. The troops under the command of Clearcus, who were divided from the other part of the army, in that battle which proved fatal to Cyrus, having loſt their proviſions, by the enemy plundering their camp, were obliged to kill the oxen and aſſes which drew the baggage waggons. Theſe animals they roaſted by fires made of the Perſian Arrows, and arms, which they found in prodigious numbers on the field of battle, near to the place where the camp lay.

Zenoph.—pg. 275. *A.*

heavy-armed men, as the battle joined. It was not uncommon to place them in lines, behind thoſe of the infantry, as they could act over the heads of the preceding ranks; † for the ſame reaſon they ſometimes fought behind the cavalry; but when the enemy approached, it was neceſſary for the horſemen to incline forwards, and cover themſelves with their ſhields.‡ The Emperor Leo very much diſapproves of this latter method of placing Archers, as from their ſituation the Arrows being directed high, "they fell on the enemy," he ſays, "in a poſition which was without effect." It is not obvious, however, why the Arrows elevated high, ſhould fall without effect, as the experience of ages has proved the value of diſtant Archery.

L 1 Matthew

† Zenophon Cyrop.—pg. 167. C.—and 226. E.

‡ Leo's Tactics.—pg. 93.

Matthew Paris and Hoveden mention, that the Engliſh Archers were mixed with the cavalry, in the time of king Stephen.

At the battle of Crecy, our Archers are ſaid to have been placed in triangles behind the ranks; and at Poictiers they were in the wings, drawn up in the ſame figure, "*rangez en herſe.*"--*See P. Daniel.*

The real advantage of Archers in war, appears, during early periods, to have been inconſiderable; they ſeem to be held in low eſtimation by Homer, and are repreſented as lurking behind poſts and trees, in order to ſhoot; or under the protection of ſome ſhield, held over them by the hand of a by-ſtander; thus fighting in ambuſh, like aſſaſſins, rather than as ſoldiers. At this period indeed, the Archers were armed only with the Bow,

without

without ſword or ſhield; it would have been raſhneſs therefore, for them to have entered the battle with a weapon calculated only for diſtant combat; and this may in ſome degree, plead an excuſe for their ſeeking ſhelter.*

The ſame idea with reſpect to Archers, was preſerved for many centuries. The Achœans, we are told by Polybius, deemed the Bow an inſidious weapon; and as they diſdained to gain battles, and to extend territories by unjuſt practices, deſpiſing conqueſt bought by artifice, they reſolved with the Peloponeſians, that Archery ſhould not be uſed among their troops; eſteeming the manly cloſe en-

* Il. Lib. 13. L. 714. The Locrian Archers had not ſword, ſhield, or javelin.

" Ου γαρ εχον κορυθας χαλκηρεας ιπποδασειας,
" Ουδ' εχον ασπιδας ευκυκλυς και μειλινα δυρα·
" Αλλ' αρα τοξοισιν."

See alſo Procopius, pg. 6.—Fol. Paris.

counter, as the only honourable means of victory.†

The

† See Polybius, Lib. 13.

Euripides puts the following words in dispraise of the Bow, into the mouth of Lycus, who he represents slighting the feats of Hercules.

———" He, with no merit, held
" The fame of daring courage, that with beasts
" He fought, in nought besides his prowess prov'd:
" His left hand never knew to raise the shield,
" Never advanc'd he nigh the spear, but held
" The Bow, a coward's weapon, and to flight
" Was always prompt; no proof of manhood, none
" Of daring courage is the Bow,"———

Amphitryon then makes answer:—

" ——— The man array'd in arms
" Is to his arms a slave, and stationed nigh
" Weak hearted dastards, through their cowardise
" He perishes; or should he break his spear,
" What hath he to protect him from the carnage,
" His valour thus disarm'd? But he that grasps
" The skilful-aiming Bow, hath in his hand
" One thing which much avails him, whence he sends
" A thousand Arrows 'gainst the breast of others,
" Himself from death defending; and, his stand
" Held distant, pours his vengeance on his foes,
" Who fall by unseen wounds, himself secure,
" Nor to their arms exposed: for in the fight
" This is the work of wisdom to annoy
" The enemies, secure from their attack."

Hercules, Act I.

I have copied the translation of Potter.

The Archers of later times, were more favourably regarded, and as they were armed with a ſhield, a ſword, and javelins, as well as the Bow; they were not afraid to venture into the midſt of the battle.‡

Vegetius complains, that the Roman Archers had in his time, laid aſide their armour, and were ſlain like cattle by the Arrows of the Goths.

Leo, in his tactics, directs that every Archer ſhall be clothed in an entire coat of mail, ſhall have a poliſhed iron helmet,

‡ The Archers furniſhed with ſwords and targets, when they approached the lines of the enemy, flung their Bows behind them, and drew their ſwords. The Sarmatians (according to Tacitus) ſhot their Arrows as they advanced, and preſſed their horſes rapidly, till they came near enough to engage with their other weapons, at which time they threw the Bow aſide. "Sarmatæ omiſſo arcu, quo brevius valent contis gladiiſque ruerent: modo equeſtris prælii more, frontis et tergi vices."

Tacitus, Annal. Lib. 6.—35.

met, ornamented on the top with a creſt; a Bow rather above, than beneath the power of the ſhooter, having its caſe large and proper. Plenty of bowſtrings, and a Quiver with a lid, containing thirty or forty Arrows, a javelin and a ſword ſuſpended to a belt, and alſo a dagger.

The Engliſh had formerly Archers both on foot, and mounted on horſes; but the latter do not appear to have been very generally introduced in war, before the fourteenth century.§ Lord Lyttleton ſays, "I read of no Archers on horſe-back in the age of Henry II. unleſs they were comprehended under the term *ſervientes*, ſome of which were light horſe-

§ "Archers were drawn from the yeomanry, and ſeemed to have ſerved on foot, as attendants on the vaſſals who held by knight's ſervice, and at their charge; or, ſometimes, under the pay, and at the charge of the King."

Lyttleton's Henry II. Vol. III. pg. 90.

horſe-men: but in the time of Edward III. mention is made, in a roll of parliament, of two hundred Archers on horſeback; and in the ſeventh year of Richard II. the biſhop of Norwich, offered to ſerve the king abroad with three thouſand men at arms, and two thouſand five hundred Archers, *well horſed and appointed.* And when Lionel Earl of Clarence (ſon of Edward III.) went with an army into Ireland, he carried with him thither many Archers on horſeback, whoſe pay was ſix-pence a man *per diem*, 'ſquires in the ſame army, being rated at one ſhilling a man *per diem*, the knights at two ſhillings, and the baronets at four ſhillings. There were likewiſe ſome Archers at four-pence *per diem*, who, I preſume, ſerved on foot. The Earl of Ormonde had under him, beſides his knights and 'ſquires, twenty *hoblers* armed, and twenty not armed; the

the pay of the former being ſix-pence a piece *per diem*, and of the latter four-pence. Theſe *boblers* were Iriſh horſemen, ſo called becauſe they ſerved on *hobbies*."*

Montfaucon in his work, entitled, "*Les Monumens de la Monarchie*," Pl. 30, Vol. IV. has given a repreſentation of the meeting of Henry VIII. and Francis I. on the "*field of the cloth of gold*," between Guiſnes and Ardres, in France.† The kings are on horſeback, followed by their reſpective attendants; and thoſe of Henry are principally Archers mounted on horſes, carrying their Long-bows with them.

I have not diſcovered, that the dreſs of the horſe Archers, differed in any material

* See Lyttleton's Hiſtory Henry II. Vol. III. pg. 220.

† If the Reader wiſh to ſee an account of this ſuperb affair, he will find it deſcribed in Robertſon's Charles V. Vol. II.

terial point, from that worn by the foot. The latter were well fortified from the attack of ſwords, or Arrows, by the ſtrength of their defenſive apparel. Their limbs were guarded by a coat of mail, in which they moved at liberty, and in which they drew their Bow without reſtraint. They wore an helmet or ſkull-cap fitting cloſe to their head, and had body-armour.

Beſides the Bow, they were armed with a Target and ſword, which, while they were engaging with Arrows, was ſuſpended on the left ſide. They carried a Quiver containing twenty-four Arrows, ſometimes on the back, and ſometimes on the right ſide; but the Arrows uſed in action, were held under a belt, to which the ſword was hung.§ Eight of

§ See the Frontiſpiece.

these Arrows were generally lighter than the rest, and were used to annoy the enemy at a great distance. We may well say, at a *great* distance, for an ancient Bow, we are told by Mr. Grose, (who quotes Nead) would throw one of these four hundred yards.‖

Our Archers formerly, also, carried a leaden maul, with which the wounded were finally dispatched. This instrument

‖ The force of Arrows is well instanced by a fact recorded in the Journal of Edward VI. which Mr. Grose quotes from Burnett's History of the Reformation. An hundred Archers belonging to the King's guard shot at an inch board, singly, two Arrows each, and afterwards all together. Some of these Arrows pierced through this, and into another board placed behind it, although the wood was extremely solid and firm.

An ancient Bow, says P. Daniel, Vol. II. 606, would carry further than a *Fusil*, and to the distance of 600 paces. If he means common military paces, each of which may consist of two feet, or rather more, the distance of the range may be set down as full 400 yards.

ment was known among the Englifh and Scotch, as early as the beginning of the fourteenth century, and continued to be ufed by them till the middle of the fixteenth. This weapon was fometimes twenty-five pounds in weight, and had an iron hoop on each end, to prevent the lead indenting on the edges. Its handle was five feet long, and it was ufually carried on the back.

It is fomething extraordinary, that the Laplanders have reprefented their great God Thor, with a Bow in one hand and a Mallet, or Maul, in the other. They fay this God wounds the evil Dæmons with his Bow, and then dafhes out their brains with the Maul.*

Befides the defenfive armour worn by each individual, there was an expedient

* Sheffer's Hiftory of Lapland.

by which the troops were often protected from the effects of Archery. One of the most beautiful, as well as useful manœuvres, in the ancient discipline, was calculated to ward off the missive weapons. The *Testudo*, was in use among the Greeks, the Romans, the English, and others; and was often executed with wonderful address. According to Potter, it was formed "when the soldiers, drawn up close together, and the hindermost ranks bowing themselves, placed their Targets above their heads; as if we suppose the first rank to stand erect, the rest to stoop lower and lower by degrees, till the last rank kneeled upon the ground; the men in front and on the sides holding their Targets before their bodies, the rest covering the heads of those that were placed before them; so that the whole body resembled a pent house, or roof covered with tile, down which the enemy's

my's miſſive weapons eaſily glided without prejudice to the ſoldiers beneath."†

The formation of the Teſtudo is often mentioned by our old Chronicle writers, and ſeems to have been much uſed in this kingdom in early times, againſt the force of Arrows and Javelins.§

Our ancient Archers, as well as thoſe of France, were accuſtomed, at the beſieging

† "M. Antoninus adverſus Parthos, qui infinitâ multitudine ſagittarum exercitum ejus obruebat, ſubſidere ſuos, & teſtudinem facere juſſit, ſupra quam tranſmiſſis ſagittas ſine militum noxa exhauſtus eſt hoſtis."

Frontini Stratagemata, pg. 159.

According to the diſpoſition of the Macedonian Phalanx, the men were drawn up in columns ſixteen deep. Polybius tells us, that the five foremoſt ranks only, preſented their ſpears, of fourteen cubits in length, to the front; while the remainder of thoſe in the rear, inclining their pikes a little, over the ſhoulders of the ranks before them, defended the men beneath, from the miſſive weapons of the enemy.

See Polybius, Lib. 17, *pg.* 26.

§ See the Quotation from *J. de Burgo.* pg. 215.

fieging of towns, to protect themfelves by a very large kind of fhield, which was placed on the ground before them, and which warded off the attacks of the enemy; while they from their ambufh, kept up a perpetual difcharge of Arrows on thofe who ventured on the walls, and whilft the larger engines and battering-rams were exerting their efforts in forcing a breach. G. Britton makes mention of thefe large fhields, as ufed by our King John, when attacking a town in Anjou.*

Befides thefe expedients ufed againft the attacks of an army, the old Englifh Archers had a method of protecting them-

* Tunc præcedebat cum Parma Garcio,‡ fub qua.
Nil fibi formidans obfeffos damnificabat.
Affiduè poterat nec ab illis damnificari
Afferibus latis dum Parma protegit ipfum.

‡ Garcio, is an old word for a boy,--Garcon in French: thefe fhields were carried about by boys. See P. Daniel, Vol. I. pg. 554.

themſelves from the approach of the cavalry. Each Bowman carried with him one, and ſometimes two large ſtakes, ſharpened at each end. Theſe were placed in the earth before the lines, preſenting their points on a level with the the breaſts of the horſes, and oppoſing their purſuit.†

The

† Groſe, Vol. I. 149.

We find alſo the following paſſage in P. Jovius, reſpecting the ancient Engliſh Archery:—"Apud Anglos in ſagittis unica ſpes et præcipua gloria, crebris victoriarum proventibus, parta eſt. Eas minimo digito craſſiores, bicubitaleſque, et hamato præfixas ferro, ingentibus ligneis arcubus intorquent: tanta vi arteque, ut ad primos præſertim ictus, ſquamoſum thoracem aut loricam facile penetrent. His è Romana diſciplina mos eſt, vallum geſtare, et dimenſo ſpatio protinus, ubi hoſtis fuerit in conſpectu, in orbem ſe munire. Palos enim teretes utrinque ferrea cuſpide præacutos in hoſtem vertunt. In medio autem eſt ferreus annulus, quo perpetua ſæpe reſte vinciuntur. Circumvallati in hunc modum, lœvo pede in ima parte palum premunt; et divaricatis cruribus, panſiſque lacertis, ſagittas excutiunt. Interna autem ſiniſtri brachii oſſea tabella contegunt, ne manicæ rugis recurrentis nervi impetus elidatur.

P. Jov. Brytan. Deſcript. Pg. 21.
Inter Balei Script. Ang.

The principal uſes for which Archers were valued in battle, have been divided under the eight following heads, viz.

1.—To begin the fight at a diſtance.

2.—To provoke the enemy, to harraſs and draw him out of his advantageous poſt.

3.—To wound the enemy at a diſtance.

4.—To diſorder the enemy as he makes his approach.

5.—To gall the horſes.

6.—To cope with, and hinder efforts of the light armed troops of their antagoniſts.

7.—To ſcout and diſcover ambuſhes, as well as to lie in ambuſh themſelves.

8.—In making ſpeedy and ſudden attempts in time of battle.||

We find from Arrian and other writers on tactics, that in ancient battles, the ſlingers,

|| Strutt, Vol. II.

ſlingers, a part of the auxiliary troops, directed their weapons againſt the wooden and ſmall arms of the enemy, but that the principal uſe of the Archers was in annoying the cavalry. This part of an enemy's army, not only preſented a number of large objects to aim at, but it has ſometimes happened alſo, that a ſingle flight of Arrows† has turned all into diſorder and confuſion. The horſes and their riders were always in compleat armour, and a diſcharge of Arrows ſome-

 times

† The effect produced on the eye by a number of Arrows paſſing through the air from one army to another, is a circumſtance which, by no Poet who has ſung of war, could be paſſed unnoticed. One might fill pages from every language with beautiful alluſions to this ſubject.

The appearance of an Arrow on the wing, viewed on the ſide, is ſingularly intereſting. Its ſteady movement—the curve it deſcribes—its aſcending and deſcending motion—its velocity, &c. are all ſources of beauty which never fail to excite agreeable feelings in the mind, and even lead us to attribute active powers, for a moment, to the ſhaft. Weakneſs and ſtrength are

times darkened the ſky by their numbers; we muſt conceive therefore the immenſe and ſudden noiſe theſe muſt occaſion in falling on the metallic coverings which oppoſed them.§

The opening of a battle, accompanied with every horrid noiſe which could be contrived; the ſound of miſſive weapons and the cries of the wounded, has thus excited ſo much terror among the horſes, as effectually to overcome the diſcipline and

are well expreſſed by the Arrow which arrives ſhort, or which paſſes far over the Target; and the different degrees of ſwiftneſs perceptible in Arrows, from Bows of various powers, immediately aſſociate the ideas of bodily vigour and energy, in various degrees of ſtrength. This is not fantaſtic—it is thus we feel pleaſure from the objects in nature which ſurround us. Vegetables ſpeak the language of the paſſions well. Does not the ſtorm make every hedge enraged; and have we not the weeping willows? We give theſe mental affections.

§ Intendunt acres arcus, amentaque torquent.
Sternitur omne ſolum telis, tum ſcuta cavæque
Dant ſonitum flictu galeæ; pugna aſpera ſurgit.

and render the whole ſquadron confuſed. In Livy, we read that the Cretan Archers compleatly routed the army of Antiochus, and turned his cavalry into flight by a ſtorm of Arrows.

The elephants and camels which were by ſome nations introduced in battle, proved admirable marks for the ſkill of the Archers, and if their Arrows chanced to turn theſe animals into diſorder, both the baſe and ſuperſtructure were uſually overthrown.

We ſhall not wonder at the relations we hear of the furious and frantic acts theſe animals have committed, if we conſider the excruciating pain a well directed Arrow muſt produce.|| They were indeed well protected with armour

|| See an account of the wound Ziſca received by an Arrow, in Gilpin's Lives of the Reformers. Pg. 306.

on the front, but the hinder parts were more expoſed; and when their heads were by any means turned from the enemy, the Arrows and Javelins being directed under their tails, inflicted mortal wounds with the ſevereſt pain.*

Animals, however, are now no longer the objects of Archery, and as the uſe of fire-arms has expelled the Bow from the field, we may hope in future, to have no reaſon of lamenting its *cruelties*.

Before I cloſe this chapter, I cannot forbear ſaying a few words with reſpect to modern Archery, conſidered as an amuſement.†

The

* ——"Sub caudis qua maximè molli cute vulnera accipiunt, fodiebant."——

Vegetius Pg. 3-6.

† Among the amuſements in which the Bow has borne a part, we ſhall find none more extraordinary than

The value of agreeable amuſements muſt be felt by all people, as the moſt important

than the following; an account of which is recorded in Plot's Hiſtory of Staffordſhire:—

"At *Abbots*, or now rather *Pagets Bromley*, they had alſo within memory, a ſort of ſport, which they celebrated at Chriſtmas, (in New-year, or Twelfth-day,) call'd *The Hobby-horſe Dance*, from a perſon that carried the image of an *Horſe* between his legs, made of thin boards, and in his hand a *Bow* and *Arrow*, which paſſing through a *hole* in the *Bow*, and ſtopping upon a *ſholder* it had in it, he made a *ſnapping* noiſe as he drew it to and fro', keeping time with the muſic: with this man danced ſix others, carrying on their ſhoulders as many *Rein-deer's heads*, three of them painted *white*, and three *red*, with the *Arms* of the chief families (viz. of *Paget*, *Bagor* and *Wells*,) to whom the revenues of the town chiefly belonged, depicted on the *palms* of them, with which they danced the *Hays*, and other *Country Dances*. To this *Hobby-horſe Dance*, there alſo belonged a *pot*, which was kept by turns, by four or five of the chief of the town, whom they called *Reeves*, who provided *cakes* and *ale* to put in this *pot*: all people who had any kindneſs for the good intent of the inſtitution of the *ſport*, giving hence a piece for themſelves and families; and ſo *foraigners* too, that came to ſee it: with which money, (the charge of the cakes and ale being defrayed,) they not only repaired their *Church*, but kept their *Poor* too: which *charges* are not now perhaps ſo cheerfully borne."

Plot's Hiſtory of Staffordſhire, pg. 430.

important advantages in ſociety are in ſome degree ſubject to their influence. If we ſay health is intereſted and improved by Archery, it will ſeem a ſufficient reaſon for its being eſteemed an elegible and uſeful amuſement; and if it can be ſhewn to poſſeſs ſome valuable qualification which do not accompany other diverſions, the propriety of it will be more conſpicuous.

That Archery poſſeſſes many excellences as an amuſement, will require little trouble to prove. It is an exerciſe adapted to every age and every degree of ſtrength, and the blood may be driven with any required velocity, by increaſing or diminiſhing the power of the Bow made uſe of. It is not neceſſarily laborious, as it may be diſcontinued at the moment it becomes fatiguing; a pleaſure not to be enjoyed by the hunter, who, having finiſhed

his

his chaſe, perceives that he muſt crown his toils with an inanimate ride of forty miles to his bed. Archery is attended with no cruelty. It ſheds no innocent blood, nor does it torture harmleſs animals; charges which lie heavy againſt ſome other *amuſements*.

It has been ſaid a reward was formerly offered to him who could invent a new pleaſure.‡ Had ſuch a reward been held forth by the ladies of the preſent day, he who introduced Archery as a female exerciſe, would have deſervedly gained the prize. It is unfortunate that there are few diverſions in the open air, in which women can join with ſatisfaction; and as their ſedentary life renders motion neceſ-

‡ Xerxes opum Regiarum oſtentatione eximia, eo uſque luxuria gaudebat, ut edicto præmium ei proponeret qui novum voluptatis genus reperiſſet."

Val. Max. L. 9. Ch. 1.
See alſo Briſſonius de reg. Perſ. 148.

neceſſary to health, it is to be lamented that ſuch ſuitable amuſements have been wanting to invite them. Archery, has, however, contributed admirably to ſupply this defect, and in a manner the moſt deſirable that could be wiſhed.

But I do not intend to ſing the praiſes of this elegant art in their full extent. Faſhion now introduces it to the world, and with far greater ſucceſs than that which may probably attend my reaſoning and feeble panegyrics. I ſubjoin a wiſh, however, that this faſhion may be univerſally cultivated and approved; and may we ſee the time when (with Statius) it can be ſaid,

"Pudor eſt neſcire ſagittas."§

§ It is a reproach to be unſkilful with the Bow.

CHAP.

CHAP. XII.

On the ARBALEST.

IN my reſearch with regard to the Long-bow, many facts and obſervations relating to the Arbaleſt, unavoidably occured to my notice; and as that weapon was formerly ſo generally employed in Europe, for ſeveral centuries, I have been induced to admit a ſhort account of it, among thoſe things having a connection with Archery, which it was intended this Eſſay ſhould illuſtrate.

We are not informed at what period the Croſs-bow was firſt introduced to the world, but it is by ſome ſaid to

have derived its origin from the Cretans; by others it is aſcribed to the inhabitants of Sicily. Many varieties, on the large ſcale, were uſed in the military operations of the Greeks and Romans; and that ſome of thoſe engines, called *Balliſtæ*, were contrived on this principle, appears from figures on the Trajan and Antonine pillars. Theſe, however, were exceedingly ſtrong, and capable of emitting large javelins; but there were others of ſmaller dimenſions, which anſwered the purpoſe of the Arbaleſt.

Authors diſagree, in deſcribing that engine called the Scorpion. Ammianus Marcellinus mentions, that it was the ſame as the Onager, an inſtrument uſed to project ſtones.* Vitruvius contradicts this

* As little hiſtorical extravagances are ſometimes uſeful in enlivening a dull page, I ſhall here mention a few facts which are recorded concerning the vaſt power of theſe military engines, the Scorpion, Onager and

this aſſertion, and ſays, that it was ſmaller, and could be managed by a ſingle perſon alone; and Iſodorus deſcribes it as a particular kind of Arrow.† But, however true theſe aſſertions may be, we find that Vegetius expreſsly ſays it was the ſame as the common Croſs-bow.‡

Oo 2 This

and Balliſta. Ammianus Marcellinus reports, that a man was ſtruck by a ſtone from a Scorpion, and was ſo completely ſhivered to atoms; that no part of his whole body could be any where perceived.—" *Adeo ut ne ſigna quidem totius corporis noſceretur.*"--See pg. 312.

Joſephus has ſtill more marvellous tales. A man, he tells us, ſtanding near him on the wall of a town which was beſieged, had his head taken off by a ſtone, which flew with it to the diſtance of three ſtadia. And as a pregnant woman was walking before the door of her houſe, a ſtone from a Balliſta having ſtruck her, it tore the infant from her body, and carried it *(ſqualling)* the ſpace of half a ſtadium.

Joſeph. Hiſt. Vol. II. pg. 1720. *Oxf. Edit.*

† Stewechii, Com. ad Veget.

‡ " Scorpiones dicebant, quas nunce manubatiſtas vocant."

Veget. L. 4. *Ch.* 22. *&* 2. 15.

Croſs-bows are called " *Scorpiones manu*" in more modern works.— See Foglieta. Hiſt. Genuenſium, pg. 352.—E. in the collection of Græyius and Burman, Vol. I.

This inſtrument is not omitted by Montfaucon. In Pl. 79. Vol. IV. there is a repreſentation of one which is called by Heron (a great engineer) χειροβαλλιςρα *the hand Balliſta*, and is ſimilar to the ancient Croſs-bow. It is drawn as if compoſed of two pieces, the ſtock and the Bow. In the middle of the ſtock, which is a piece of wood, about three times as broad as thick, there is a grove, whoſe ſides are elevated ſomewhat above the ſurface of the ſtock. In this grove, the Arrow is placed; and the Bow is fixed at the end of it in ſuch a poſition, that the ſtring ſweeps the whole length in diſcharging, and catches the Arrow which is placed in it, as thoſe modern ones do which ſhoot bolts. This kind is properly the Scorpion, and differs in conſtruction from the modern Croſs-bow, in the parts from whence the ſtring is ſet at liberty; which will be hereafter ſhewed.

The

The Ballifta, or Arcuballifta, is faid to have been introduced among the Roman weapons, about the time of Conftantine, or rather before;§ but it remained among the arms of the auxiliaries, and feems to have been little efteemed by the regular troops.

Among the Englifh, the firft mention of the Crofs-bow, that I have obferved, is in Speed; who quotes Johannes Pomarius.* He fays of the Saxons, that their arms were long fpears, broad fwords, and the *Crofs-bow*.† This weapon, however, does not appear to have been very much in ufe, till fome

years

§ Circum feculum Conftantini, aut paulo ante, videtur in militiam recepti.

Pitifci Lex.

* Johannes Pomarius wrote the Saxon Hiftory in the German language.—See Frefnoy, Vol. XI.

† Speed, pg. 287.

years after thoſe people firſt entered our iſland.

It is not entirely certain what kind of Bow was uſed by the Normans at the defeat of Harold. Mr. Barrington ſuppoſes it to have been the Arbaleſt, but our old hiſtorians ſay little on the ſubject. Fabian and others mention, that Harold was wounded in the eye, but they do not ſpeak of the kind of Arrow which gave the wound.

We may conclude, I think, almoſt without a doubt, that William himſelf ſhot an Arbaleſt. A paſſage in Sir J. Hayward's life of that King, ſays, that the conqueror "was ſtately and majeſtical in his figure; of good ſtature, but in ſtrength admirable, inſomuch as no man was able to draw his Bow, which he could bend ſitting upon his horſe, *ſtretching out the ſtring with his foot.*"

In

In order to underſtand this ſentence clearly, it will be neceſſary to ſay a few words on the conſtruction of Croſs-bows.

Theſe inſtruments being of wood, horn, or ſteel, were of various degrees of power; the weaker ones were bent by the hands alone; but to draw the larger and more powerful, there was a kind of ſtirrup affixed, into which one foot, and ſometimes both feet were placed, in order to aſſiſt in moving the ſtring. P. Daniel quotes a line from Britton, which ſhews that the feet were uſed in the manner ſpoken of.§

We have only to conceive, therefore, that William had a Croſs-bow of this kind; and that he could, even on horſe-back, bend this ſtrong weapon, with his foot placed in the ſtirrup affixed to it.

An

§ "Balliſta duplici tenſa pede miſſa ſagitta."

An expreſſion made uſe of by our old hiſtorian, Thorn, ſeems to imply the uſe of the Arbaleſt among the troops, at the battle of Haſtings. He ſays, the Normans entered the field with drawn Bows, "*arcubus tenſis.*"|| It is well known that Arbaleſters frequently carried their weapons with the ſtring drawn, and the Arrow placed ready to ſhoot; and indeed it became neceſſary in more recent times to make a law prohibiting perſons from travelling on the highways with loaded Croſs-bows, as paſſengers were much annoyed by the danger of an accidental diſcharge. The expreſſion, therefore, "*with drawn Bows,*" applies with propriety to the Arbaleſt, and cannot be interpreted of the Long-bow.‡

I have

|| See Thorn, pg. 157.—Anglic. Script. Poſt Bedam.

‡ The cuſtom of uſing the foot in ſtringing the Arbaleſt, may have been very ancient, perhaps, if we judge

I have not been able to discover the least hint, which enables us to judge of the kind of Bow from which the Arrow issued, that gave the fatal wound to William Rufus, while hunting on New Forest.

In the time of Henry II. we find several facts spoken of, which shew the Cross-bow to have been very common in that reign. In 1172, the conquest of Ireland was undertaken by the troops of this king; and several detachments were sent forth, in each of which Archers are particularly mentioned. The party commanded by Fitz-Stephens was first

judge from a circumstance mentioned by Pitiscus:—"In Burgundiæ nostro agro Alexiensi propre Arnetum repertæ sunt haud ita pridem duæ icunculæ, sive sigilla argentea, unum militis quasi legionarii, pari certe habitu, veterani, barbati, & vultu retorido, hujusmodi *Arcuballistam ad pedem tendere conantis:* alterum juvenis imberbis, in linea militari monolore, & arcum tendentis. In urna vitrea sub terra inventa sunt."

landed in Ireland, and confifted of thirty knights, fixty 'fquires, and three hundred Archers.* The Englifh armies drove all before them; and Rapin explains this circumftance by obferving, "that it is almoft incredible, that the Irifh, who were exceedingly numerous, fhould fuffer themfelves to be overrun by an handful of Englifhmen. The reafon is imputed to their great dread of the Englifh *Crofs-bow*, the ufe of which, till then, was unknown to them."†

Little is faid of the inftrument in our hiftory from this period till about fixty years afterwards; when Richard I. was killed by an Arrow from one of them, at the fiege of Chaluz.

This

* Hume, Ch. 9.

† Rapin, Vol. I. pg. 235.

We have before obferved, (pg. 219) that *Archery* was firft made known to the Irifh in Henry the Second's invafion.

This fact is mentioned by almost all our historians. Speed says, "that when Richard was at the siege of this castle, an Arbalester standing on the wall, and seeing his time, charged his steel Bow with a square Arrow, or Quarrel, making first prayer to God that he would direct the shot, and deliver the innocency of the besieged from oppression. Whereupon discharging it, as the king was viewing the castle, within the distance of such an engine; and the king, (upon hearing the Bow go off) stooping with his head, was mortally wounded in the left shoulder."§

When the king lay ill of his wound, says the same author, he desired the person who had shot him to be sent for. Bertram Gurdan, or Bertram de Gurdom, for that was his name, was accordingly

§ Speed, pg. 481.

brought before him; and being aſked by Richard, What could induce him to do ſo unprovoked an injury? Bertram replied, "Thou haſt killed with thy own hand, my father and my two brothers, and now thou wiſheſt to kill me, therefore take thy revenge, whatever it be."* Richard, however, did not ſhew any reſentment againſt Bertram on this occaſion, but behaved in a manner ſomewhat heroical. He pardoned his offence, ſet him at liberty, and made him a preſent of an hundred ſhillings ſterling. But as ſoon as the king was dead, one Markadey, an officer in the king's confidence, apprehended him again, and put him to death in a moſt cruel manner.

It

* See Ang. Script. Poſt. Bedam.—Hoveden, pg. 450.—Stow, pg. 316.—Grafton, pg. 107.

In Camden are theſe lines on the death of Richard;—

"Iſtius in morte perimit Formica Leonem
"Proh dolor! in tante ſunere mundus obit."

Annal. of Ireland.

It is well known that Richard was expert in the management of the Crofs-bow, and that he killed many perfons with his own hand. Brompton, when fpeaking of the king's death, feems to rejoice that he met with fo deferved a fate.||

It appears, that in England, Crofs-bow-men were very common in the reign of Henry III. Matthew Paris fays they attended the army, and generally preceded the main body of it, at the diftance of a mile,*

I per-

|| "Ipfe (Richardus) fiquidem hoc genus fagittandi, quod arcubaliftarum dicitur, jamdudum fopitum, in ufum, ut dicitur, revocavit, unde et in eo peritus plures manu propria peremit, quo et ipfe poftmodum in terra propria inprœmunitus, et inopinate interiit, neque enim lex ulla æquior eft,

"Quam necis artifices arte perire fua."

Brompt. pg. 1278.

* Baliftarii quoque, eorum exercitum femper præibant uno ferè milliari.

Mat. Paris; Vol. I. pg. 295. *Anno* 1217.

And

I perceive nothing remarkable with respect to the Cross-bow, from this time till the reign of Edward III.† when in the year 1363, the king wrote to the sheriffs of London, on account of the decline of Archery; and ordered that "they should cause public proclamation to be made; that every citizen, at leisure times and holidays, use in their recreations Bows and Arrows, or Pellets, or Bolts, (these Bolts were the Arrows used for Cross-bows, as will be shewn hereafter) and learn the art of shooting."

From

And again, pg. 589—42—An. 1242,—"Erant autem in exercitu Regis Anglorum tunc mille sexcenti milites, & viginti milia de pedestri expeditione, et septingenti *Arcubalistarii.*"

† In Rymer, indeed, is the following passage with respect to Cross-bow-men:—"Liberavit quatuor hominibus ad Arma, quatuor Balistariis & quatuor sagittariis in munitione Castri de Shirburn commorantibus."

Reign of Edward II. See Rymer, Vol. III. pg. 21?.

And again, Vol. III. pg. 946, two hundred Cross-bow-men are spoken of, Anno 1322.

From the reign of this king, till the time of Richard II. nothing occurs worth relating, in regard to the Crofs-bow in this country. It was, however, made ufe of at Bofworth field, 1485; and there is an Arbaleft in the Lichfield Mufeum, which was found on the place of battle.

The fucceeding king, Henry VII. was more partial to the Long-bow than the Arbaleft; and in the nineteenth year of his reign, forbade the ufe of the latter, in order to encourage the practice of the former.§ It is from this period, we may date the decline of the Crofs-bow in this country, as in the following reigns it was but little in efteem. Henry VIII. indeed, inftituted a fociety of Archers, called

§ 19th Henry VII. ch. 4.—"No man fhall fhoo in a Crofs-bow, without the King's licence, except he be a Lord, or have two hundred mark land."

called the Fraternity of St. George, to encourage the practice of the Arbalest and Long-bow; but the Arbalest appears to have been very little used: that king also, made a law which tended very much to check the use of it. Stat. 33. Ch. 6. complains that divers murders had been perpetrated by means of Cross-bows; and that malicious and evil-minded persons carried them ready bent and charged with Quarrels, to the great annoyance of passengers on the high-ways. The act therefore restrains this custom, and ordains that those who are possessed of lands to the value of an hundred pounds per annum, shall alone use the Cross-bow; and that they shall not ride with them on the king's high-way, nor shoot within a quarter of a mile of any city, or market town, under a penalty for so doing.

The

The 25. Hen. VIII. Ch. 17. is nearly to the ſame effect as the preceding, and there are ſeveral others of the ſame import, made in this king's reign; after which period, few or no laws have taken notice of the Arbaleſt.

In France, Arbaleſters ſeem to have been in uſe as early as the time of *Louis le Gros*. There is a paſſage in Ducheſne's Hiſtory of France, which mentions both Archers ſhooting by the hand, and Croſs-bow-men.*

This inſtrument, during the beginning of the reign of Philip the Auguſt, was ſo far diſuſed, that not one was to be found among his troops. P. Daniel quotes the following paſſage from William Britton, who wrote his Philip-

 pics,

* "Cum magna Militari, ſagittaria manu & Balliſtaria, obviaſſet."—*Vol. IV. pg.* 282.

pics in the end of the twelfth century, and who ſpeaking of the age of this king, has theſe words:—

"Francigenis noſtris illis ignota diebus
"Res erat omnino quid Baliſtarius arcus
"Quid Balliſta foret, nec habebat in agmine toto
"Rex quemquam ſciret armis qui talibus uti."

The reaſon given for the diſcontinuance of the Arbaleſt, during the time of Philip the Auguſt, appears to be, that that weapon was prohibited, by a Canon of the ſecond Lateran Counſil, holden in 1139, as *hateful to God, and unfit to be made uſe of among Chriſtians.*† But although the Canon was ſtrictly obſerved for ſome years,

† "Artem illam mortiferam & Deo odibilem Baliſtariorum & Sagittariorum adverſus Chriſtianos & Catholicos exerceri de externo ſub anathemate prohibemus." — *Can.* 30.

And alſo, 4th Lateran Counſil, Can. 18:—"Nullis quoque clericus rotariis aut Baliſtariis aut hujuſmodi viris ſanguinem præponatur." This may allude to the the larger engines, but I do not imagine it does, in this caſe.

years, and until the commencement of the reign of Philip; it was nevertheless, soon after, revived among warlike instruments by that king; and he is supposed to have taken example from the conduct and advice of our Richard I. who brought the weapon into great repute during his expeditions on the Continent, in the time of Philip, with whom he was intimate.§

At the siege of Turin, in 1536, P. Daniel says there was but one Arbalester in the French army; but he was so expert that he killed more persons than any of those using the Harquebuss.

 The

§ Britton says, Richard revived the Arbalest in France: the Poet introduces Atropos, one of the Destinies, as decreeing the King's death by that weapon.

"Hâc volo, non aliâ Richardum morte perire:
"Ut qui Francigenis Ballistæ primitus usum
"Tradidit, ipse sui rem primitus experiatur;
"Quamque alios docuit, in se vim sentiat artis."

Philip. Lib. 7.

The fame the Genoefe have acquired by their fkilful management of the Crofs-bow, induced me to fearch the hiftories of that ftate, in order to difcover the period in which it became fo much in favour among them. Thefe people are celebrated very early, for their ingenuity in contriving warlike engines, and for their matchlefs fkill in managing them. The fuccefs which attended the Chriftians, at the fiege of Jerufalem, in 1100, is attributed principally to the mechanical talents of the Genoefe; but although a variety of arms and engines of war, fuch as battering-rams, towers of wood to mount the walls of cities, balliftæ, &c. are enumerated by fome Italian writers, I have not, however, difcovered that the Arbaleft is any where exprefsly named. But it is reafonable to fuppofe this inftrument was then in ufe among them, as they

they are ſaid to have had all kinds of miſſive weapons.*

In the beginning of the thirteenth and until the middle of the fifteenth century, Croſs-bow-men are uniformly made mention of among the Genoeſe troops. From Juſtiniano we learn, that in the year 1225, twenty Arbaleſters mounted on horſeback, and one hundred on foot, having Bows of horn, were then employed in the army of the ſtate.|| Five hundred were ſent againſt the Milaneſe, in 1245, and theſe unfortunate men being placed

in

* Taſſo, in his "*Gieruſalemme Liberata*," makes mention of the Arbaleſt, and Quarrels, which were the Arrows uſed for that kind of Bow:—

"Quinci le frombe, e le *Baleſtre*, e gli archi."

Cant, 20.—23.

See alſo Cant. 20—63—12—4, &c.

|| "Venti Balleſtrieri a cavello & cento Balleſtrieri a piede con le Balleſtre di corno."

Annali di Genoa, pg. 75.

in the front of the lines, were taken prisoners by the enemy; who, to revenge the havock done by their Bows, cruelly punished each with the loss of an eye, and the amputation of an arm; after which they were liberated and sent back to their native country, where they received a pension from their fellow citizens.†

The greatest number of these troops which appears to have been ever introduced into the field, was at the battle of Crecy, in 1346, in which engagement the foremost rank of the French army was composed of fifteen thousand Genoese Cross-bow-men.§

For the space of more than a century, no anecdote worthy of notice occurs, till

† Foglieta, Vol. I. pg. 352.——Thesaur. Hist. Ital. Grævii & Burmanni.

§ Hume, Vol. II. pg. 432.

till the period in which the Byzantine court was finally ſubverted by the Turks, in 1453, at which time three hundred Arbaleſters, among a number of other armed men, were ſent from Genoa to aſſiſt the beſieged.

I ſhall here cloſe my account:—And although I have with ſome diligence looked over the hiſtories of the Republic, and the works relating to Genoa, which are inſerted in the collections of Muratori, Græviu and Burman, I have not been able to diſcover either the time in which the Croſs-bow was introduced into the Italian armies, or the period of its entire baniſhment; the two principal æras, the moſt valuable to record.

Arbaleſts were made on different principles, but the more modern form was that repreſented Fig. 5. Pl. 4. and which is

is copied from a very old book on French tactics.

In the middle of the Bow-ſtock at A. was inſerted a ſmall round piece of iron, Fig. 6. It was on this nut (as they termed it) that the ſtring was held when they charged the Bow. This nut was fixed in the ſtock by a ſcrew paſſing through its center, and on which it freely turned. The notch L. aroſe above the ſurface of the ſtock on its upper ſide, and the ſtring was received into it when drawn up. B. Fig. 5. repreſents a trigger, the end of which was inſerted into the notch G. Fig. 6. and prevented it from moving while the nut held the ſtring; but on being preſſed (as it turned on a pin) the end was diſplaced from the notch, and the nut turned round by the force of the ſtring, which it ſet at liberty and projected the Arrow.

The

The Scorpion was made in a very different method, but as it was a complex instrument, a verbal deſcription would be but indiſtinct. I ſhall refer thoſe, therefore, who have a deſire to examine its conſtruction, to Mr. Groſe's Hiſtory of the Army, Vol. II. Pg. 286, where the parts are all delineated ſeparately, and alſo to Montfaucon, Antiq. Expliq. Vol. IV. Pl. 79.†

† There are ſome other kinds mentioned: concerning the peculiar figures of which I am not entirely clear. ——"Baliſtæ a pectoribus."——"Rectæ Baliſtæ, quibus iſtæ muchettæ propriè deputantur, ſunt Baliſtæ, quæ Baliſtæ a pectoribus nuncupantur."——"Arbaleſt à tour."——"Parce qu' elle ètoit bandèe evec un tour."

Vous peuſſiez les magoneaux
Voir par deſſus les carneaux;
Et aux Archères tout autour
Sont les *Arbaleſtes a tour.*

See Caſeneuve. Les Origines de la Langue Francois. Paris, Folio 1694.

The Arrows ſhot from Croſs-bows were called Quarrels, or Bolts.* They were uſually headed with a large ſquare pyramid of iron, but had ſometimes other forms given to them: See Pl. 3, in which the figures on the lower parts of the plate, are of Arrows for the uſe of the Croſs-bow. Theſe, as well as thoſe for Long-bows, had heads which fitted on to them occaſionally, and which, when carried into the fleſh, remained there. Figures 1 and 3, are the ſhafts of Arrows; and Figures 2 and 4, the heads to be applied to them.

Inſtead of feathers, the Quarrels were ſometimes trimmed with plates of braſs, or iron.

One

* "Parce que le fer en ètoit quarrè."—*P. Daniel.*

——Quadratæ cuſpidis una
Pendit arundo.——

One ſpecies of Quarrel, which was called in French the *Vireton*, from its ſpinning round as it paſſed through the air, was made as our common Arrows are at preſent,—with the feathers ſet on a little curved; but it is probable that that method of placing the feathers was not in general uſed in the fifteenth century, the period in which the *Vireton* is moſt ſpoken of, or a particular name would have been unneceſſary.

An Engliſh phraſe, (as Mr. Barrington obſerves) originated from the uſe of the *Bolt*.—*I have ſhot my Bolt*, is a ſaying which intimates an attempt having been made in ſome way. An example of this expreſſion occurs in Langtoft's Chronicle,§ where an Eſſay on Stonehenge is entitled, "*A Fool's Bolt ſoon ſhot at Stonage.*"

§ Oxford Edition, Octavo, 1725.

It was cuſtomary among thoſe who practiſed with the Croſs-bow to have a mark, which they called a Popingay, formed like a Parrot, as we may ſuppoſe, and which was ſuſpended in the air. Stow in his " *Survey of London*," ſays, the Croſs-bow makers rented Tazel-Cloſe, a place near Moorfields, for the purpoſe of exerciſing themſelves with that weapon, at the Popingay.† The practice has been very ancient in France, and appears from P. Daniel, to have been inſtituted as early as the reign of Philip I.*

The Croſs-bow, as it is capable of being managed with greater accuracy than the Long-bow, has been in all times uſed in the chaſe; and even long after the conſtruction of the muſket was highly improved, the ſilent diſcharge of the Arbaleſt,

† Stow's Survey, pg. 175.

* Hiſt de la Milice, Vol. I. pg. 379.

Arbaleſt, rendered it more valuable in the purſuit of timorous animals, than any other weapon.|| It was formerly, and perhaps is at preſent in uſe, for the purpoſe of killing deer; and gentlemen often *amuſe* themſelves by ſhooting bullets at rooks and rabits, which ſome can ſtrike with wonderful dexterity.‡ For killing birds,

|| Anciently, when the foreſts were preſerved for the ſake of hunting, an inferior officer belonging to thoſe diſtricts, was called "*The Bow-bearer.*" The appointment is now fallen into diſuſe; but the following form of the oath taken by that officer, will explain the duty with which he was entruſted:—

"I will be true man to the Maſter of this Foreſt, and to his Lieutenant; and in their abſence I ſhall truly over-ſee, and true inquiſition make, as well of ſworn men, as unſworn, in every Bailwich, both in the North-bail and South-bail of this Foreſt; and of all manner of treſpaſs done, either to Vert or Veniſon, I ſhall truly attach, or cauſe to be attached, in the next Court of Attachment, there to be preſent, without any concealment had to my knowledge.

SO HELP ME GOD."

‡ No circumſtance which has fallen under my obſervation, illuſtrates ſo well, the accuracy with which the Croſs-bow was formerly ſhot, as the following paſſage

birds, there was a particular kind of Arrow, having a ball of wood at the end of it, and which was named the "*Bird-bolt*." This Arrow had often, besides the ball, an iron point which projected before it, and with which the smaller animals were transfixed.

At present the Cross-bow is but little in use in England, but there are many places on the Continent, in which societies practise with it.

CHAP.

passage in *Wood's Bowman's Glory*. "On March the 21st, anno 1661, four hundred Archers, with their Bows and Arrows, made a splendid and glorious show in *Hide-Parke*, with flying colours, and Cross-bows to guard them. Sir Gilbert Talbot, Bart. was their Colonel, Sir Edward Hungerford, Knight of the Bath, their Lieutenant Colonel, Mr. Donne was their Major. Great was the appearance both of the nobility, gentry, and commonalty. Several of the Archers shot near twenty score yards, within the compass of a hat, with their Cross-bows; and many of them, to the amazement of the spectators, hit the mark. There were three showers of Whistling-arrows. So great was the delight, and so pleasing the exercise, that three regiments of foot laid down their arms to come to see it."

Bowman's Glory, pg. 73.

CHAP. XIII.

Of SKILFUL ARCHERS.

I Shall now lay before my readers ſome of the exploits of thoſe heroes, who have individually ſignalized themſelves as Archers.

Nations, as well as men, have been famous in antiquity, for their ſkill in the management of the Bow. The Cretan Archers, were early employed by the Greeks, and were extremely valued by that people. The Perſians were

were celebrated in all ancient hiſtories, and appear to have been very expert; truſting as much to their Arrows, as their ſwords. The Parthians were remarkable for their dexterity in ſhooting behind them, on an enemy preſſing upon the rear, and whilſt their horſes were in full ſpeed.* This art, however, was by no means peculiar to the Parthians, as the Scythians§ and Sarmatians are reported to have ſhot in the ſame attitude. The inhabitants of India, and thoſe bordering on that country, were all

* "Parthi miſſilibus telis, aut ſagittis aſſueſcunt, citis cohortibus nunc occurſantes, nunc terga dantes, ſimulata ſuga."——And Virgil alſo,

"Fidentemque fuga Parthum, verſiſque ſagittis."

§ The more modern Scythians, or Tartars, are ſaid to be very adroit on horſeback.—"Men of that country ben alle gode Archeres, and ſhooten righte welle, bothe men and women, als wel on hors bak, prykinge, as on fote, renninge."

Maudevile's Trav. pg. 301.

all characterized of old, as ſkilful Archers.†

We muſt not enumerate the Greeks or Romans, among thoſe nations excelling in Archery, as they preferred the cloſe attack; diſdaining the Bow, as tedious and uncertain. The Roman, inflamed with the hopes of ſignalizing himſelf by acts of perſonal bravery, ſtood with impatience while the enemy were beyond his graſp. Nor could he but deſpiſe that diſtant encounter, wherein the ſkill of every one was compleatly obſcured. He choſe the cloſer combat. His javelin flew with unerring aim. His ſword ſtruck irreſiſtable; while his firm, though battered

† What Horace ſays of a particular people in the Eaſt, may be applied to all, as the uſe of the Bow was eſtabliſhed in the higheſt antiquity among thoſe nations:

"Doctus ſagittas tendere Sericas
"*Arcu paterno.*"

battered ſhield, glanced every well-direct-ed weapon aſide. This was the ſchool wherein the Roman loved to ſtudy, and which taught him to view the Archer with contempt.

Although the Legions of the Roman ſtate were unaccuſtomed to the uſe of the Bow,‡ Archery was nevertheleſs cultivated by many private individuals. The Circus was often the ſcene where feats of this kind were exhibited; and even Emperors themſelves were actors. Domitian and Commodus, have been particularly celebrated for their matchleſs excellence in managing the Bow; but at the ſame time we admire the ſkill of theſe performers, we muſt allow, how little in

‡ Romanis ipſis ab antiquo vix fuerunt ſagittæ. Sed poſt Punicum bellum ſecundum crebcrrima in Romanis caſtris ſagittarii, ſed auxiliares, non cives.

Lipſius.

in character he muſt appear, who acts the Archer in the Imperial purple.

It is reported of Domitian, that he would often place boys in the Circus at ſome diſtance from him, and as they held out their hands, and ſeparated their fingers, he would ſhoot an Arrow through either ſpace, without injury to the hand of him who *acted target*.*

The feats recorded of Commodus, are numerous; and he appears to have been one of the moſt expert Archers hiſtory has made mention of.

* Suetonius. Vita Domitian.

The reader will, I hope, excuſe the expreſſion, "*acted Target*," when he recollects ſome of the characters in "*The Midſummer Night's Dream*:"—*Moonſhine*,—*Lion*,—and a *Wall*.

"In this ſame interlude it doth befall,
"That I, one *Snowt* by name, preſent a *wall*."

Act V. Scene 2.

It is ſaid by Herodian,† that his hand was unerring both with the Javelin and with the Bow; and that the moſt experienced Parthian Archers, yielded to his ſuperior ſkill.§ He would kill all kinds of animals in the Amphitheatre by way of exerciſe, and to ſhew the ſteadineſs of his arm. But it is obſerved, that he, in theſe caſes, generally prefered to ſhew his art, rather than his courage; as he ſecured himſelf on a place elevated beyond the reach of any attack which might have happened from his opponents. Stags, Lions, Panthers, and all ſpecies of beaſts, fell without number by his hand; nor was a ſecond Arrow neceſſary, for every wound proved mortal. He would ſtrike an animal in any particular point

† Lib. 1—15.

§ "—— felix arcus, certique petitor
" Vulneris, et juſſum mentiri neſcius ictum."

Claud. 4. *Cons. Hon.* 528.

point he wished with the greatest accuracy, in the head, or in the heart. A Panther was sometimes let loose into the Circus, where a criminal was placed; and just as the animal was going to seize the culprit, he would drive an Arrow so opportunely, that the man should escape unhurt. An hundred Lions have been introduced at the same time upon the Arena, and with an hundred shafts he would lay them lifeless. He caused Arrows to be made with heads curved in a semicircular figure, and with these he could cut off the neck of an Ostrich running in full speed.

This feat is, perhaps, the most difficult of the whole number, the Ostrich being extremely swift of foot, and having a neck of very small magnitude. Herodian observes also, that when the Emperor amputated the head of one of these animals,

the

the ſtroke ſevered the parts ſo inſtantaneouſly, that the body ſometimes proceeded ſeveral paces, as if ſtill living; the motion not being immediately checked.

Conſtantius was much ſkilled in the practice of Archery, and is ſaid to have ſtudied that art in his youth, under the direction of a preceptor.*

Both the Emperor Julian† and Gratian are characterized as expert Archers. The latter

* Neque veromanipulares ſolum milites, ſed principes et jam juventutis, ſeu Imperatorum liberos, eundem quoque artem, prout de Conſtantio dicitur ſub Doctoribus ſagittariis didiciſſe, docebit in ejuſdem Imperatoris & fratris Conſtantis laudatione, Libanius.

See Cyrill. advers. Jul. pg. 109.

This Emperor is ſaid by others to be—— "minus artifex in ſagittas——————deſtinandi ſagittas mire promptus," &c.

See Spanheim Obſ. ad Orat. Jul. pg. 114.

† —Maximeque perite dirigendi ſagittas. *Am. Mar. L.* 21. *Ch.* 16. *and Spanh.* ubi ſupra.——ιππου τε αναβαινειν, και τοξον εντειναι, και βελη σκοπου τυχειν. Theſe were his exerciſes.

latter propoſed to himſelf the actions of Commodus as examples, and like him, frequently exhibited to the public, the adroitneſs with which he could kill animals, running together in an encloſed place, by his Arrows.||

An anecdote recorded of a perſon, whoſe name was Aſter, has immortalized him as one of the moſt expert of Archers. He poſſeſſed ſuch ſkill with his Bow, that as he ſaw Philip of Macedon among his troops, he wrote upon an Arrow which he intended to ſhoot at that King—"*Aſter ſends Philip a deadly Arrow*;" and having diſcharged it, ſtruck the right eye of Philip; but although the wound was not mortal, it deprived him of ſight on that ſide.§

A very

|| Ammianus Marcellanus, Lib. 31, Ch. 10, pg. 491.

§ Philippus Olynthum & Methonem oppugnaturus dum trajicere Sandanum fluvium vi contendit, ſagitta ictus

A very extraordinary, and perhaps in war one of the moſt uſeful Archers, is ſpoken of by Zoſimus, in his account of the battle between Conſtantius and Magentius, at Murſa. This ſoldier, whoſe name was Menelaus, poſſeſſed the art of ſhooting three Arrows from his Bow at one diſcharge, and with them could ſtrike three different perſons. By this ſkilful expedient, ſays the hiſtorian, he killed a great number of thoſe who oppoſed him; and the enemy, it might almoſt be ſaid, were defeated by a ſingle Archer. Unfortunately, however, this valuable man at laſt fell by the hand of Romulus, a general of the army of

ictus eſt ab Aſtere Olynthio qui et dixit,

"Aſter lethale Philippo mittit ſpiculum."

Philippus retro ad ſuas natando evaſit, amiſſo ex eo vulnere oculo.

Plutarch. Parrel. pg. 307. *Vol. II. Fol. Par.* 1624.
See Juſtin alſo, Lib. 7. *Ch.* 6.

of Magentius, whom he had firſt wounded by an Arrow.‡

The ſtory of William Tell is perfectly known, and in the mouth of every one; I need not therefore celebrate his ſkill, by giving an account of the exploit he is ſaid to have performed with his Bow.

Quintus Curtius relates, that Beſſus having been condemned to death, and crucified, for the murder of Darius, his body was ordered to be guarded while on the croſs, leſt the birds ſhould moleſt it. The office was committed to one Catenus, who was ſo excellent an Archer, that he could hit thoſe animals with his Arrows.*

Tt It

‡ See Zozimus, Lib. 2. pg. 132, Oxf. Edit. Octavo.

* "Ut Alexander Oxathrem fratrem Darii, quem inter corporis cuſtodes habebat, proprius juſſit accedere; tradique Beſſum ei, ut cruci adfixum mutilatis auribus naribuſque, ſagittis configerent barbari; *adſervarentque corpus, ut ne aves quidem contingerent.* Oxathres cetera

It appears probable that birds formerly were often killed by Arrows, as the circumſtance is hinted by ſeveral authors. Diodorus Siculus, indeed, tells us, that ſome of the Ethiopian nations were ſo adroit, that they ſubſiſted entirely on the birds they ſhot with their Bow.† We muſt

cetera ſibi curæ fore pollicetur. Aves non ab alio quam a Catene poſſe prohibere adjicit; eximiam ejus artem cupiens oſtendere. Namque adeo certo ictu deſtinata feriebat, ut aves quoque exciperet. Nam etſi forſitan ſagittandi tam celebri uſu minus admirabilis videri hæc ars poſſit; tamen ingens viſentibus miraculum, magnoque honori Cateni fuit.

Q. Curt. Lib. 7. *Ch.* 5.—40.

A law made in France in the reign of Dacobert, anno 630, inflicted a penalty on Archers, who, ſhooting at birds which came to devour the dead after a battle, wounded the body on which they ſat. - "Et ſi ut ſæpe contingat, aquilæ vel ceteræ aves cadaver repererint, & ſuper ad lacerandum conſederint, & aliquis ſagittam ejecerit, & cadaver vulneraverit, et repertum fuerit, cum duodecim ſolidis componat."

Capit. Reg. Franc. pg. 136.

† — ουκ ολιγοι δ' αυτων και ταῖς τοξειαις ενηθληκοτες των πτηνῶν, ευςοχως πολλα τοξευουσι δι ὧν την της φυσεως ενδειαν αναπληροῦσιν.

Lib. 3. *Vol. I. pg.* 179.

muſt underſtand, I imagine, in the above paſſages, that the birds which the Archers are ſaid to have killed, were flying; though that is not expreſsly mentioned. If they were ſitting ſtill, and were large birds, the difficulty of hitting them at a ſhort diſtance would not be ſo great as may be ſuppoſed. Savages in America, and India, are ſaid often to kill birds; and it is common to ſee on cabinets from the Eaſt, figures of men ſhooting Arrows at them.

Some very ancient and rude pieces of ſculpture, which are copied by Stralenburg, in his Hiſtory of Siberia, (Pl. 3 and 4,) repreſent Archers riding on horſeback, who are aiming at birds flying in many directions, low to the ground, and perpendicularly over their heads. The plates, in the voyages of Ramuſio,

contain ſeveral figures ſhooting at birds which are perching on trees.

Among the feats which have been recorded of Hercules, that of his killing the ſtymphalic birds (or ſwans) with his Bow, muſt not be omitted. This is often figured on gems and other antique pieces of ſculpture.—See Taſſie's Gems. No. 5750; and Spenſe's Polymetis, Pl. 18. Fig. 5.§

The Caribbees ſeem to have poſſeſſed an art in ſhooting their Arrows, peculiar to themſelves, as appears from a circumſtance which occurred to Columbus, in his ſecond voyage. "A canoe belonging to theſe people, having accidentally fallen in with the fleet under his command, a veſſel with a few men was ſent towards it,

§ "Æripedem ſilvis cervam Styphalidas aſtris
"Abſtulit:"——

Martial.

it, while the other ſhips ſurrounded it in order to cut off a communication with the ſhore. When the perſons in the canoe ſaw it was impoſſible for them to eſcape, they fought with great reſolution. and wounded many of the Spaniards, although they had Targets and other kind of armour; and even when the canoe was overſet, it was with difficulty the people were taken, as they continued to defend themſelves and to uſe their Bows with *great dexterity* while ſwimming in the ſea."‡

From the accounts we have of the Perſians, they appear to be aſtoniſhingly expert in the art of ſhooting the Bow; and if we believe the relations of thoſe who have travelled in the Eaſt, (and theſe relations are uniform) they certainly are to be placed in the firſt rank of Archers.

‡ Robertſon's Hiſtory.

Archers. Chardin ſays, that the Perſians in their exerciſes ſhoot the Bow with incredible accuracy; ſo accurate, that they will drive an Arrow into the ſame hole, many times ſucceſſively. The Butts they uſe are made of ſand, beaten hard into a wooden frame, the ſurface of which is rendered ſmooth before the Archers begin to practice. An Arrow ſhot ſtrong againſt one of theſe Targets, will uſually penetrate pretty deep, perhaps half its length; and the excellence of an Archer is the greater, in proportion as the number of ſhots required to drive an Arrow over head in the hole, made by the firſt ſhot, diminiſhes. This feat is what they generally propoſe to themſelves, and it not unfrequently happens, that they accompliſh their end.

In Perſia alſo, they excel in ſhooting the Bow while on horſeback; a ſpecies of

of Archery we in this country are entirely ignorant of. The author above quoted (Chardin) deſcribes the method of practiſing this art, as extremely curious.

A mark is placed on the top of a maſt about ſix and twenty feet from the ground. The horſeman who is prepared to ſhoot, rides on full ſpeed towards the mark, and having paſſed it, his Bow being ready drawn, turns round and diſcharges his Arrow backwards. Sometimes they ſhoot to the right hand, and ſometimes to the left, according to the direction in which they guide their horſes, in reſpect to the mark they propoſe to aim at.

Our traveller ſpeaks of this game as common in all the villages of Perſia. The nobility and the kings are fond of it, and often practice. He ſays, that Sephy, the grandfather of the king who occu-

occupied the throne, at the time he made his tour, excelled in this ſport; and would uſually ſtrike the Target, if not with the firſt Arrow, with the ſecond he never erred.†

Mr. Tavernier had an opportunity of being preſent at a review of the Perſian cavalry, during his reſidence in the Eaſt, in the year 1654. His account of the exhibition is curious, and will alſo enable us to judge of the degree of excellence, to which Archery was brought in that nation.

"The

† This diverſion was formerly in uſe among the Turks, as we find the following account given by Buſbequius:—"Mos eſt antiquus gentis jam a Parthis deductus, ut in equo fugam ſimulantes hoſtem temere ſubeuntem ſagitta feriant: quod ut faciant expeditius ita conſequuntur: Summam altiſſimæ perticæ, ſive mali in plano erecti partem æreo globo i.dunt, quem ad malum ubi celerrimo curſu equum incitarunt, jamque nonnihil prætervecti ſunt, repente converſi reſupinatique equo curſum perficiente, ſagittam in globum illum mittunt: cujus rei frequenti uſu efficiunt, ut nullo negotio arcu in fuga verſo hoſtem incautum figant."

Buſbeq. pg. 200.

"The King," he ſays, "accompanied by his principal officers, ſtood on a portal to one of the royal gardens; from whence they viewed the moſt expert and beſt-looking of the troops, who were ordered to ride ſingly before the place where the King was ſtationed. The horſemen rode full ſpeed; and as they paſſed, each man ſhot an Arrow into a turf Butt, prepared for the occaſion, in ſight of the king and the officers. When the review cloſed, the perſon whoſe Arrow ſtood neareſt the center, was promiſed an increaſe of pay."

"I was at Caſbin," ſays Mr. Tavernier, "at the time; and remember one horſeman, who, riding in his turn, when he came before the portal, ſtopped his horſe, and walked over the plain, contrary to the orders of the general. When he came oppoſite the Butt, he re-

fused to shoot his Arrow, and only raised his arms in the attitude of drawing the Bow. This horseman was unfortunately of a very forbidding mein; and the King, enraged to see his discipline so grossly disregarded, and by one he judged incapable of any excellence, gave immediate orders for him to be dismissed the service. His weapons and horse were taken from him on the spot; and the King's directions would have been fully executed, had not one of the generals pleaded his cause. It was represented to the King, that the cavalier, though so ill-looking, was one of the best soldiers in the whole army:—that he had fully proved his skill and courage in the sieges of Erivan and Candahar;—and that his father was among those who maintained the attack of Bagdad three times. Having heard this character, the King, at the request of the officers, commanded the horse

horſe and arms to be reſtored to the cavalier, and he was ordered to take his turn in the review. He accordingly rode into the preſence of the king, and turning his horſe firſt to right, then to left, in ſome agitation, cried out, " Where would the King have me to ſhoot ?" On which one of the generals anſwered, " At the Target where the other horſemen have ſhot." The cavalier ſhaking his head, ſaid with a ſmile, " Muſt I direct my Arrows againſt a turf ? I would rather point them at the enemies of my country ; then would I with more pleaſure ſhoot three Quivers full, than a ſingle Arrow at this turf." He then, with great dignity, drew two Arrows from his Quiver, and holding one of them between his teeth, fitted the other into his Bow ; when forcing his horſe vigorouſly acroſs the plain, till he had paſſed the Butt, he in the Parthian attitude, drove an Arrow

into the center of the Target. Turning about, he in the ſame manner ſhot his ſecond Arrow preciſely into the hole from whence his firſt Arrow had been drawn.

"The general who had before pleaded for the cavalier, now approached the king, and hoped the adroitneſs of that ſoldier had ſatisfied the expectation he had raiſed. At the ſame time ſeeing the cavalier at hand, and preſenting him to the King, his Majeſty not only expreſſed admiration at his great ſkill, but ordered five times the propoſed reward to be given him."

The Turks are ſaid to have been formerly very dexterous in the management of the Bow, though at preſent that inſtrument is little uſed among them. An old writer, who reſided in Conſtantinople

at

at a time when Archery was cultivated, ſpeaks highly of the feats of theſe people.

Boys at the age of eight years, or even ſeven, began to practiſe with the Bow, in order to render their arms ſtrong and ſteady; and by the time they arrived at manhood, they could ſhoot with ſo much accuracy, as to drive an Arrow into the eye of a man, or could hit any part equally ſmall. They could, during their practice, ſhoot ſeveral Arrows into a mark not larger than a die, from the diſtance of ten yards.

Once a year, ſays the author alluded to, on a particular day the Archers were uſed to meet on a plain, in order to try their ſkill in ſhooting to a diſtance; and the ſpot where the moſt remote Arrow fell, was always marked by a large ſtone,

fixed

fixèd up by way of commemoration. This cuſtom had ſubſiſted many years, and there were a great number of theſe ſtones to be ſeen at different diſtances on the plain.* What is extraordinary in this cuſtom is, that the Archers did not ſhoot their Bows ſtanding in the uſual poſition, but every one ſat croſs-legged, in the manner common to the Turks.

It muſt be obſerved, that the Bows uſed anciently by the Eaſtern nations, were much ſhorter than thoſe made at this time in England; for which reaſon a man ſitting on the ground would feel no inconvenience from the lower end of the Bow ſtriking the earth in ſhooting, which would have been the caſe had thoſe inſtru-

* Stuart mentions a random ſhot with an Arrow, of Haſſam Aga, governor of Athens, which he meaſured and found to be 1753 Engliſh feet, or 584 yards. See Athenian Antiq. Vol. I.

instruments been formerly as long as the modern ones.§

Hitherto I have celebrated the heroes of prose, I shall now end the whole with mentioning a few heroes of poetry.

It would be an endless task to relate all the exploits of the Bow which have been

§ " Ex his aliquot solemni Paschatis (nam et ipsi suum habent pascha) in magna super Peram planicie conveniunt, ubi æqua fronte humi considentes cruribus ita compositis ut sartorum apud nos consuetudo est (ea est enim propria Turcarum sessio) à precatione orsi (ita sua omnia Turcæ auspicantur) inter se quis longius sagittam mittat contendunt. Agitur ea res magna modestiâ & silentio, quamvis adstante spectatorum multitudine. Arcus habent ad eam rem brevissimos, eoque rigidiores, nec ulli nisi exercitatissimo flexibiles: sed et peculiares in eum usum sagittas habent. Victori linteum acu pictum, quo faciei sudorem solemus abstergere, præmium proponitur; sed multo maximum gloria. Quantum vero spatium suis sagittis transmittant, creditu difficile. Locus quo adacta est ejus sagitta, qui eo anno longissime jaculatus est, lapide signatur. Eorum lapidum jam a priscis temporibus plures extant, illis qui hodie ponuntur, multis passibus remotiores, quos

been recorded in fiction. It will be sufficient for me to select two instances, the most perfect of their kind. The first I refer to, is the story which is told of Ulysses, in the twenty-first book of the Odyssey. The poet feigns, that Penelope, wearied by the solicitations of her suitors during the absence of Ulysses at the Trojan war, at length forms a resolution to determine which of the lovers shall receive

quos majorum suorum metas fuisse persuasum habent: ad quorum robur & jaculandi scientiam ipsi se adspirare non posse, fateantur. In diversis vero urbis Constantinopolis vicis & quadriviis hujusmodi ludi sunt, quo non modo pueri & adolescentes, sed et provectioris ætatis homines congregantur. Scopo præest aliquis, ad quem ejus tuendi cura pertinet, qui quotidie aggerem aquâ rigat, exariturum alioqui sic ut sagittæ (quibus utuntur in ludo obtusis) figi in eo non possent. Qui quidem scopi custos assidue astans terra extractas mundatasque sagittas jaculantibus rejectat. Quo nomine a singulis certa donatur stipe, qui ei quæstus est. Scopi frons ostioli similitudinem refert; ex quo forte usurpatum est Græcis proverbium, ut cum toto scopo aberrare aliquem significare volunt, eum jaculari contra januam, dicant."

Busbequii, Opera, Ep. 3.

receive her hand. She produces a Bow which had been left with her by her husband, and thus declares her propoſal:

"Who firſt Ulyſſes' wond'rous Bow ſhall bend,
"And thro' twelve ringlets the fleet Arrow ſend,
"Him will I follow, and forſake my home,
"For him forſake this lov'd, this wealthy dome.
"Graceful ſhe ſaid, and bade Eumæus ſhew,
"The rival peers the ringlets and the Bow."

Pope.

Juſt as they had agreed to deſide by this expedient, Ulyſſes diſguiſed in the dreſs of a ſhepherd, returns from Troy. After ſeveral of the lovers had tried unſucceſsfully, even to bend the Bow; and after ſome altercation concerning the propriety of allowing a man of ſo mean an appearance, to have any chance of gaining the prize; Ulyſſes takes the Bow—

"And ſitting as he was, the chord he drew,
"Thro' ev'ry ringlet levelling his view;
"Then notch'd the ſhaft, releaſt, and gave it wing:
"The whizzing Arrow vaniſh'd from the String,
"Sung on direct, and thredded ev'ry ring.
"The ſolid gate its fury ſcarcely bounds;
"Pierc'd thro' and thro', the ſolid gate reſounds."

 Ulyſſes

Ulyſſes having gained this prize, diſcloſes himſelf, and immediately puts to death thoſe ſuitors to Penelope, who had taken advantage of his abſence.

I give the outline of this beautiful ſcene with all brevity, hoping the reader will be excited to peruſe the whole account in the Odyſſey itſelf.

The ſecond paſſage I intend to produce, is from the twenty-third book of the Iliad.* Homer is deſcribing the funeral games inſtituted by Achilles, in honour of Patroclus; among which a conteſt of the Bow is introduced.

" Thoſe who in ſkilful Archery contend,
" He next invites the twanging Bow to bend:
" And twice ten axes caſts amidſt the round,
" (Ten double-edg'd, and ten that ſingly wound.)
" The maſt, which late a firſt-rate galley bore,
" The hero fixes in the ſandy ſhore:

" To

* Virgil has copied this Arching ſcene, with a little variation, in Æneid 5 L. 485.

" To the tall top a milk-white Dove they tye,
" The trembling mark at which their Arrows fly.
" Whoſe weapon ſtrikes yon' fluttering bird, ſhall bear
" Theſe two-edg'd axes, terrible in war;
" The ſingle, he, whoſe ſhaft divides the cord.
" He ſaid: experienc'd Merion took the word;
" And ſkilful Teucer: In the helm they threw
" Their lots inſcrib'd, and forth the latter flew.
" Swift from the String the ſounding Arrow flies;
" But flies unbleſt! No grateful ſacrifice,
" No firſtling Lambs, unheedful! didſt thou vow,
" To Phœbus, Patron of the Shaft and Bow.
" For this, thy well aimed Arrow turn'd aſide,
" Err'd from the Dove, yet cut the cord that ty'd:
" A-down the main-maſt fell the parted ſtring,
" And the free bird to Heav'n diſplays her wing;
" Seas, ſhores and ſkies with loud applauſe reſound,
" And Merion eager meditates the wound.
" He takes the Bow, directs the ſhaft above,
" And following with his eye the ſoaring Dove,
" Implores the God to ſpeed it thro' the ſkies,
" With vows of firſtling Lambs, and grateful ſacrifice.
" The Dove, in airy circles as ſhe wheels,
" Amid the cloud the piercing Arrow feels:
" Quite thro' and thro', the point its paſſage found,
" And at his feet fell bloody to the ground.
" The wounded bird, e'er yet ſhe breath'd her laſt,
" With flagging wings alighted on the maſt,
" A moment hung, and ſpread her pinions there,
" Then ſudden dropt, and left her life in air.
" From the pleas'd crowd new peals of thunder riſe,
" And to the ſhips brave Merion bears the prize."

Pope's Homer.

APPENDIX.

IN the note, page 90, it is ſaid, that in order to ſhoot their Bows, the Archers placed them on the ground.—The ſame is aſſerted of the Indians, in the quotation from Arrian, at page 87, of this Eſſay.

The parts here referred to, are extremely obſcure as they ſtand at preſent; but a paſſage from Quintus Curtius, which I by an overſight have omitted in its proper place, in a great meaſure explains them. The hiſtorian ſays, "The Indians ſhoot their Bows with more labour than effect, becauſe their Arrows, the force of which is principally on account of their lightneſs, are on the other hand of an unweildy load."—"*Quippe telum, cujus in levitate vis omnis eſt, inhabili pondere oneratur.*" Lib. 8. Ch. 9. Having mentioned theſe large Arrows, he in another place tells us, "that

"that on account of their weight, the Archer is obliged to rest his Bow upon the ground, while he adapts the Arrow to the String, and *before* he lifts it up to shoot.—*nec sagittarum quidem ullus erat barbaris usus: quippe longas & prægraves, nisi prius in terra statuant arcum haud satis apte & commode imponunt.*—Lib. 8. Ch. 14." This is very different from shooting the Bow by placing it on the ground, as the before-mentioned authors intimate.

Of the ROYAL COMPANY *of* ARCHERS, *in* EDINBURGH. *See pg.* 229.

THE practice of Archery being greatly decayed in Scotland, divers gentlemen, in the year 1676, associated themselves to restore the same, and to obtain Letters Patent to erect a Company for that purpose: preparatory to which they drew up certain articles of the following tenor for their better regulation:—

I. That a council, consisting of seven members of the society, be annually chosen, one whereof

whereof to be preſident, who ſhall make rules and conſtitutions for the government of the company.

II. The ſaid council ſhall appoint three of the moſt expert Archers to hear and determine all diſputes and differences which may happen to ariſe amongſt the ſeveral members concerning Archery.

III. That the council conſtitute a treaſurer, fiſcal, clerk and officer,—one beadle; and to provide books for recording the tranſactions of the ſociety.

IV. That none be ſuffered to practiſe the art of Archery within the city or ſuburbs of Edinburgh, but freemen of the company; and each perſon, before his admiſſion, to undergo a trial, in reſpect to his knowledge in Archery; and if approved, by the judges appointed for ſuch trial, ſhall be admitted into the freedom of the company, by a proper inſtrument under the ſeal of the ſociety.

V. That certain perſons be appointed by the company to inſtruct the inexperienced who deſire to become members of the ſociety, till they

they be qualified to undergo a trial, preparatory to their admiſſion.

VI. That each perſon, at his being admitted a member of the ſociety, to give a diſcretionary ſum of money, according to his quality, for the uſe of the company; and that all pecuniary mulcts and amerciaments be paid to the treaſurer, for the uſe of the ſociety.

VII. That public Butts be erected, either at the company's expence, or by donation from the town council, for the uſe of the ſociety, which ſtrangers ſhall likewiſe have the uſe of without fee or reward.

VIII. That a prize be provided at the expence of the company, (if one be not given by way of a preſent) to be yearly ſhot for, to be prepared at the will and pleaſure of the town council, whether a ſilvern Arrow, cup, or other piece of plate, and the ſolemnity to be obſerved at after the winning the ſaid prize, to be in the ſaid council's option.

IX. That the company, or as many of them as ſhall be ſummoned by the council to ſhoot, either at Butts or Rovers, for an extraordinary,

traordinary, or any public occaſion, ſhall be ſure to attend, no excuſe to be admitted for abſence, but ſickneſs, or other lawful impediment.

X. That the company have proper officers, with colours and drums, under proper regulations, with all neceſſary accoutrements, and to be muſtered once a-year, with the ſociety's arms, or a ſymbol in their hats or bonnets, and to perform ſuch exerciſes as the council ſhall pleaſe to order.

The above conſtitutions were not only confirmed by the Privy Council on the 6th of March, anno 1677; but the commiſſioner of the king's treaſury, at the recommendation of the ſaid Privy Council, gave the company the ſum of twenty pounds *Sterling* to purchaſe the firſt prize to be ſhot for.

The company being by letters patent from Queen Anne, of the 31ſt December, in the year 1713, erected into a corporation by the ſtile and title of *The Royal Company of Archers*; applied to the Common Council of Edinburgh, for a piece of waſte ground on the weſtern ſide of the parliament cloſe near *Beth's* Wynd, to

erect Butts on. The ſaid council, willing to encourage this laudable undertaking, not only granted their requeſt, but, as a further encouragement in the year 1719, gave them the ſilver Arrow belonging to the city, to be annually ſhot for; and on the 20th of May, anno 1726, confirmed the ſame with additions of the following tenor.

I. That the ſaid ſilver Arrow be ſhot for at Rovers, in the Links of Leith, on the ſecond Monday of the month of July yearly, at ten of the clock in the forenoon, if good weather; if not, to be ſhot for on the firſt fair Monday following.

II. That notice be given on the laſt Monday of June, and firſt Monday of July, of the yearly ſhooting for the city's Arrow, by beat of drum throughout Edinburgh.

III. That none be admitted to ſhoot for the ſaid Arrow, but the members of the company, who are ready and willing to admit all qualified perſons into the freedom of their company.

IV. That a ſpot of ground of at leaſt thirty ells ſquare, round each mark be ſet up for ſecurity of the ſpectators, and the Archer's

Arrows;

Arrows; and that none but the members of the company presume to enter the same during the time of shooting, under the penalty of four pounds Scotish money.

V. He that wins the Arrow shall keep it in his possession till the first Monday of the following month of April, on his giving security to return it to the treasurer of the company, with his badge affixed thereto.

VI. That on returning the said Arrow to the treasurer by the Winter, the dean of Gild to pay him the sum of five pounds *Sterling* as the prize, in lieu thereof.

VII. That a register be kept of the times the Arrow was shot for, by whom won, the names and numbers of the Archers, who shot for it, with those of the badges or symbols appended thereto.

This Royal Company of Archers, consisting of the prime nobility, gentry, and other persons of distinction, on the yearly day of shooting, are richly apparelled in the Highland dress; and in their march through the city, form a very pompous procession, which not only attracts persons of note from the distant parts of

Scotland

Scotland to behold the ſame, but many perſons of diſtinction from the Northern parts of England reſort hither on that occaſion.

Maitland's Hiſt. of Edinburgh. Pg. 323, *Fol.*

Page 241. The following account of Barlow being created Duke of Shoreditch, is given in the "*Bowman's Glory*".

"This noble king (Henry VIII.) at another time keeping a Princely Court at Windſor, cauſed ſundry matches to be made concerning ſhooting in the Long-bow; and to which came many principal Archers, who being in game, and the up-ſhot given, as all men thought, there was one *Barlo* yet remaining to ſhoot, being one of the king's guard; to whom the king very graciouſly ſaid,—"Win them all and thou ſhalt be Duke over all Archers." This *Barlo* drew his Bow, and ſhooting won the beſt. Whereat the king greatly rejoiced, commending him for his good Archery; and for that this *Barlo* did dwell in Shoreditch, the king named him *Duke of Shoreditch.*"

Bowman's Glory. Pg. 41.

THE END.